GUIDE TO MIAMI

AND ENVIRONS

AMERICAN GUIDE SERIES

Ex Libris
ORVILLE J. SWEETING

A GUIDE TO
MIAMI AND DADE COUNTY
Including Miami Beach and Coral Gables

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PLANNING YOUR VACATION IN FLORIDA

MIAMI AND DADE COUNTY

INCLUDING MIAMI BEACH AND CORAL GABLES

AMERICAN GUIDE SERIES

ILLUSTRATED

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Foreword

Nobody can tell now, exactly, why Rome and Paris and London began, or what made them endure and grow great. It is as if there were places and times in which human activity becomes a whirlpool which gathers force not only from man's courage and ambitions and high hopes but from the very tides of disaster and human foolishness which otherwise disperse them. Such cities seem to grow in spite of people, by some power of the whirlpool itself, which puts to work good and bad, fineness and cheapness, everything, so long as it has fibre and force and the quality of aliveness that makes life. Something like that, it seems to me, has happened here in south Florida, under the sun and the hurricane, on sand and pineland between the changeless Everglades and the unchanging sea. Miami has been building itself with all the tough thrust and vigor of a tropic organism. I doubt if it will be complete, or the whirlpool slack, in a long time because its strength is that nothing human is foreign to it, or will be.

MARJORY STONEMAN DOUGLAS

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MIAMI GENERAL INFORMATION

RAILROAD STATIONS: Florida East Coast Rwy., 200 N.W. First Ave;. Seaboard Air Line Rwy., 2206 N.W. Seventh Ave.

AIRPORTS: Pan American Airways, Inc., 2500 S. Bayshore Drive; distance 5.5 miles, taxi fare $1.15; time 15 minutes; ticket office, 300 E. Flagler St.; bus from Columbus Hotel 50c, 45 minutes before each Pan American plane departure. Eastern Air Lines, airport 36th St., Miami Springs, 7 miles from city, taxi fare $1.50; time 30 minutes; ticket office, 38 Biscayne Blvd., bus from 38 Biscayne Blvd. 50c, 30 minutes before each plane departure. National Airlines, Inc., Municipal Airport, Le Jeune Rd. and 119th St.; distance 13 miles, sedan leaves ticket office, 308 N.E. First St., 45 minutes before plane time, fare $1. Goodyear Blimp, W. end County Causeway; rates $3 per trip over city. Chalk's Flying Service, County Causeway; Karl Voelter, Inc., Municipal Airport, Le Jeune Rd. and 119th St.; planes for charter, rates vary, dependent on trip.

BUS LINES: (Interstate) Florida Motor Lines Corp., Greyhound Bus Lines, Tamiami Trailways, Union Bus Station, 275 N.E. First St., Pan American Bus Lines Terminal, 53 N.E. 1st St.

BUS TOURS: All parts of Greater Miami are covered by sightseeing tours. Inquire Florida Motor Lines Corp.; Davis Sightseeing Packard Sedans, 301 E. Flagler St.; Greyhound Sightseeing, 275 N.E. First St.; Miami For Hire Cars, Inc., 11 N.E. 3rd Ave.; Florida Transportation Co., N.E. Fifth St. at Biscayne Blvd.; Red Top Sightseeing Bus, Biscayne Blvd. at E. Flagler St.

LOCAL BUSES: Miami Transit Co., Terminal at 51 S.E. First St.; Dunn Bus Service, Inc., Terminal at S.W. First St. and Miami Ave. Rates 10c within city limits; reasonable rates in zones outside city limits. Transfers from bus to bus. To Miami Beach, 10c. Terminal at N.E. 1st Ave. and Flagler St.

TAXIS: Prevailing rates 15c for first quarter mile, 5c each additional quarter mile. Downtown zoning system for taxi stands. For hire and sightseeing automobiles available at bus stations and hotels.

JITNEYS: To Miami Beach, 10c County Causeway and 15c Venetian Causeway; terminal N.E. First St. at Miami Ave.

STREET CAR SERVICE: Miami Beach Railway operates all street

cars in Greater Miami area. Quite inadequate especially in outlying sections where 20 to 30 minute schedule is maintained. Fare 5c. No through service, no transfer from bus to street car in Miami except to N.W. Seventh St. bus from street car, additional fare 5c.

STEAMSHIP LINES: Clyde-Mallory Steamship Co., Pier No. 2, foot of N.E. 10th St., to New York, Jacksonville, Galveston. Merchant and Miners Transportation Co., Pier No. 1, foot of N.E. 12th St., to Jacksonville, Savannah, Norfolk, Baltimore, Philadelphia and Boston and Nassau. Saunders and Mader Steamship Agency, Terminal Dock, to Nassau. Peninsular and Occidental Steamship Co., Pier No. 2, foot of N.E. 10th St., to Key West and Havana. Moore & McCormack, Pier No. 3, foot of N.E. Ninth St. (Limited passenger service) New Orleans, Galveston, Philadelphia, New York City.

PIERS: Biscayne Bay Yacht Club, 2540 S. Bayshore Drive; City Yacht Basin, N.E. Third, Fourth and Fifth Sts. at Bayfront; Royal Palm Docks, S.E. Second St. and Bay. Coconut Grove City Docks, Aviation Ave. at Bay; 79th Street Causeway; Little River, numerous private piers on Miami River.

TRAFFIC REGULATIONS: Person driving in Miami more than 30 days must obtain driver's license; semi-annual inspection of automobiles is required. All accidents must be reported immediately to police. Out-of-tate automobile licenses are good until expiration in state where issued. If automobile owner is employed in Florida, certificate and state license required immediately. Speed limit 20 miles per hour in downtown zone, 30 miles elsewhere, throughout city, 35 miles on causeways. When entering an unmarked intersection, vehicle on left shall yield right-of-way to vehicle on right. Trucks, wagons or drays weighing with their load more than 1½ tons are prohibited from using Biscayne Blvd. S. of N.E. 47th St., provided, however, that these vehicles will be permitted to cross the boulevard and will be allowed to operate one block for the purpose of making deliveries. At intersections, pedestrians are required to follow the lateral anad the cross lines.

PARKING REGULATIONS: In the downtown zone, park-o-meters have been installed E. and W. from Biscayne Blvd. to N.W. Second Ave.; N. and S. from N.E. and N.W. Third Sts. to S.E. Second St., inclusive. Rates in some sections, 5c for each 30 minutes; in others, 5c for each 60 or 90 minutes. Parking lots, rates varying from 10c to 25c, are available in almost every block in the downtown section. At S.E. Second Ave. and S.E. Second St., R. turn on red light is allowed; at Biscayne Blvd. and N.E. Fifth St.; Biscayne Blvd. and N.E. 13th St.; Biscayne Blvd. and N.E. 15th St.; N.E. 13th St. and

Bayshore Drive. Elsewhere in the city all turns are on the green light. No turns are permitted for south-bound traffic on Miami Ave. at N.W. First St., at Flagler St., and none on N.E. Second Ave. at Flagler St.

STREET ORDER AND NUMBERING: Flagler St., running E. and W., bisects Miami Ave., running N. and S., thus dividing the city into four sections. The section N. of Flagler St. and W. of Miami Ave. is called the Northwest section; the section S. of Flagler St. and W. of Miami Ave. is called the Southwest section. The section N. of Flagler St. and E. of Miami Ave. is called the Northeast section; the section S. of Flagler St. and E. of Miami Ave. is called the Southeast section. Beginning at Flagler St., streets numbered in both directions, with a First St. N. and S. of Flagler and successively in both directions, Second St., Third St. and so on. Avenues are numbered from Miami Ave. in both directions in like manner with First Ave., Second Ave. and so on. All streets and terraces run E. and W.; all avenues, places and courts run N. and S. The principal streets in the shopping district are: Flagler St., Miami Ave., N.E. and N.W. First Sts.; N.E. and N.W. Second Sts.; S.E. and S.W. First Sts.; N.E. and S.E. First Ave.; N.E. and S.E. Second Ave.

ACCOMMODATIONS: HOTELS: APARTMENTS: European and American plan hotels; apartments and rooms from the most modest to the most luxurious; homes of all sizes by the season; trailers and tourist camps. Foreign and American food at prices to suit every taste. Rates higher from December 1st to April 1st; unbelievably low rest of year.

INFORMATION SERVICE: Miami Chamber of Commerce, 35 N.W. Second St.; Miami Civic Center, 35 N.W. Second St.; Traveler's Aid Society, 200 N.W. First Ave.; Miami Motor Club, 242 Biscayne Blvd.; Greater Miami Free Information Bureau, 11806 Biscayne Blvd.; American Automobile Association, 1331 Biscayne Blvd.; South Florida Motor Club, 1331 Biscayne Blvd.

RADIO STATIONS: WQAM (1,000 W.); WIOD (1,000 W.).

AMUSEMENTS AND RECREATION: Twenty-four motion picture theaters, four Negro; nearest beaches 3.5 miles to Miami Beach. TENNIS: Public tennis courts are: Henderson Park (clay), N.W. Third St. and Ninth Ave., 20c day, 50c night (illuminated); Moore Park (clay), N.W. 36th St. and Seventh Ave., 20c day; Biscayne Park (paved), N.E. Second Ave. and 20th St., free; Coconut Grove Park, Loquat Ave. and Douglas St., free; Oak Ave. and Matilda St., free; Little River Park, N.W. 79th St. and First Ave., free; Wynwood

Park (clay), N.W. First Ave. and 34th St., free; Highland Park (clay), N.W. 18th St. and Tenth Ave., free.

GOLF: Miami Springs (municipal) Red Road in Miami Springs, greens fee $1 winter, 50c summer, caddie fee $1, 18 holes. West Flagler St. course at 37th Ave., greens fee $1 winter, 50c summer, caddie fee $1, 18 holes; Miami Country Club, 1345 N.W. 11th St., greens fee $1, caddie fee $1, monthly rate fees varying with privileges.

DIAMOND BALL: Central Field, illuminated, N.W. 20th St. and 11th Ave.; Moore Park, illuminated, N. W. Seventh Ave. at 36th St.; Miami Field, illuminated, N.W. Third to Fifth Sts., and 14th to 16th Aves. Fees vary. Wynwood Park, N.W. First Ave. and 34th St., free; Highland Park, N.W. 18th St. and Tenth Ave., free.

BOWLING ALLEYS: Brunswick Bowling Center, 24 N.E. Second St.; alleys at: 103 W. Flagler St.; 1329 N.E. Second Ave.; Biscayne Blvd. and 79th St.; 24 N.E. Second St.; 39 N.W. First St.; N.W. Seventh Ave. at 29th St. Per game: 15c, ducks; 20c, tenpins. Special rates to League bowlers. Crescent Bowling Alleys, 2490 N.W. Seventh Ave.; Lucky Strike Bowling Alley, 2975 S.W. Eighth St.; Miami Recreation Bowling Center, Inc., 301 S. Miami Ave. Palace Bowling Center, 2101 Miami Ave.; Buena Vista Bowling Alley, 135 N.E. 36th St.

BOXING ARENAS: Tuttle Arena, 35 S.E. Fourth St.; Miami A.C., 13th St. and N.E. Second Ave.; Miami Field, N.W. 15th Ave. and Third St.; nominal admission.

OTHER RECREATIONAL FACILITIES: Miami Lummus Park, N.W. Third St., and Third Ave., free shuffleboard courts, horseshoe courts, bowling on the green, chess and checkers, dominoes, roque and croquet, cards. In November dances begin at Miami Civic Center, 35 N.W. 2nd St. In December daily bridge parties begin at Miami Civic Center. In February picnics, boat rides and beach parties arranged by Miami Civic Center. Open air Bible Class, 3:30 P.M. every Sunday, Bayfront Park. Sightseeing boat trips Biscayne Bay and Miami River from City Docks, N.E. Third St. and Bay, fare $1; glass bottom boats to Marine Gardens in Bay and ocean, fare $1. Bayfront Park, foot of E. Flagler St.; free band concerts tri-weekly during winter season; chess and checkers at club house.

Miami Anglers Club, 243 N.E. Fourth St.; headquarters for fishing enthusiasts.

Home Towners Clubs at Miami Lummus Park, open daily.

New Tourist Building, Miami Lummus Park; center of State Societies and recreational activities.

Three Score and Ten Club, 150 S.E. First St.; open to all more than 70 years of age, open forum discussions each Tuesday morning, dances each Saturday evening, admission to members 10c. General admission 25c.

Weekly Community Sings: Little River, Wynwood Park, Coconut Grove, Moore and Riverside Parks, dates announced.

Miami Riding Academy: 3277 N.W. 38th St., $1 per hour, saddle horses; North Miami Riding Academy, 13575 N.E. 6th Ave., fee $1 per hour with groom. DuPuis Dude Ranch, 3400 N.W. 62nd St., fee $1 per hour. Greynolds Park, Riding Academy, 5416 N.W. 12th Ave., fee $1 per hour. Hialeah Riding Club, 67 W. Eighth St., Hialeah, fee $1 per hour; Isaak Walton League, clubhouse, N.W. Third St. and 43rd Ave., skeet and coursing, yearly fee, $3.

Peckaway Skeet and Trap Club, 3400 N.W. 54th St., skeet. Yearly membership (by invitation only) $12. Gallery for shooting open to public, $1.25 per round, target and shells included. Miami Civic Center, 35 N.W. Second St., where special tourist activities are scheduled.

Biscayne Kennel Club, N.E. Second Ave. and 115th St., greyhound racing nightly, except Sunday, December to April, admission 25c.

West Flagler Kennel Club at 37th Ave., greyhound racing nightly except Sunday, December to April, admission 25c.

Jai-alai (Hi-li) games at Biscayne Fronton, 3500 N.W. 35th Ave., daily except Sunday, December to April, admission 25c.

Hialeah Park, 79th St. in Hialeah, horse racing, January to March, general admission $1.35.

Midget Auto Racing, 6601 W. Flagler St., Tuesday, Thursday and Saturday nights. Admission 25c.

CALENDAR OF ANNUAL EVENTS

January:

All American Air Meet, Municipal Airport.
All States Card Club Annual Luncheon.
Annual Midwinter Amateur Golf Tournament, Miami Country Club.
Annual Sigma Chi Round-up sponsored by George Ade.
Beaux Arts Black and White Costume Ball.
Hispanic Institute, University of Miami.
Masquerade Ball, Miami Civic Center.
Metropolitan Miami Fishing Tournament, January-April.
Miami Yacht Club Sailing Regatta, Miramar Course off N.E. 18th St.
Miami Open Golf Championship, Miami Springs Golf Course.
Orange Bowl Football Game, Roddey Burdine Stadium.
Orange Festival.
President's Birthday Ball.
Racing Program opens at Hialeah Park.
Recreational Contests, Miami Lummus Park.
Southeast Florida Tennis Championships, Henderson Park.
South Florida Shuffleboard Championships, Miami Lummus Park.

February:

Annual Arts Exhibits and Artists High Noon Luncheon at Miami Woman's Club.
Annual Dixie Amateur Golf Tournament, Miami Country Club.
Annual Frost-Bite Dinghy Races, sponsored by Biscayne Yacht Club, S. Biscayne Bay off Coconut Grove.
Annual Glen Curtiss Trophy Golf Tournament, Miami Springs Golf Course.
International Flower Show, Miami Civic Center.
Men's Handicap Golf Tournament, West Flagler Golf Course.
Miami-Nassau Yacht Race.
Sir Thomas Lipton Challenge Cup Race.
South Florida Horse Shoe Championship, Miami Lummus Park.
Valentine Ball, Miami Civic Center.
Washington's Birthday Ball.

March:

Annual Biscayne Bay Regatta between causeways.
Annual International $4,000 Four-Ball Golf Tourney, Miami Country Club.
Florida State Sailboat Championship.
$3,500 Greater Miami Fishing Tournament sponsored by 13 communities.
Masquerade Ball, Miami Civic Center.
Miami-St. Petersburg Yacht Race starting from Government Cut, South Beach, sponsored by Biscayne Yacht Club.

St. Patrick's Day Ball, Miami Civic Center.
Tropical Park Racing re-opens.

April:

Annual Pan American Day Pageant and Parade, Bayfront Park.
City Fishing Tournament, City Yacht Basin, Bayfront Park.
Miami Relay Olympics, Moore Park.

May:

Annual May Breakfast, All States Club.
Annual Moore Park Play Day, N.W. 7th Ave. at 36th St.
Annual Pioneer Day Dinner and Bayfront Park Program.

June:

Annual Flag Day Service, Bayfront Park.
Annual Royal Poinciana Festival.

July:

Miami Annual Birthday Celebration.

August:

All States Card Club Annual Birthday Party, Miami Civic Center.

September:

Labor Day Celebration, Parade and Bayfront Park Program.

October:

Grand Masquerade Hallowe'en Ball, Miami Civic Center.
Miami Country Club Championship Golf Tournament.
Miami Yacht Club Sailing Regatta.
Navy Day Celebration, U.S. Naval Airport.

November:

Armistice Ball, Miami Civic Center.
Football Festival Week, Roddey Burdine Stadium.
Isaak Walton League Annual Field Meet at Clubhouse.
Miami High vs. Outside Football Team, Roddey Burdine Stadium.
Thanksgiving Ball, Miami Civic Center.
Thanksgiving Concert, Bayfront Park.

December:

Annual Miami Open $2,500 Golf Tourney, Miami Springs Country Club.
Biscayne Kennel Club Opening.
B.P.O.E. Annual Memorial Service, Bayfront Park.
Christmas Eve Ball, Miami Civic Center.
Empty Stocking Fund Program, Bayfront Park.
Ice Sports Open at Coliseum.
Jai-alai Opening at Biscayne Fronton.
Miami High vs. Outstanding Northern High School Football Team, Roddey Burdine Stadium.
Municipal Band Concert Opening, Bayfront Park.
Racing Program Opens at Tropical Park.
New Year's Eve Dance, Miami Civic Center.
Village Post Office Opens, Miami Lummus Park.
West Flagler Kennel Club Openings.
Winter Athletic Carnival.

Part I

MIAMI AND DADE COUNTY

THE NORTHERN HALF OF THIS MAP IS OMITTED.
ATLANTIC OCEAN
GULF OF MEXICO
LAKE
O-KEE-CHO
BEE or
BIG-WATER
PAY HAI-O-KEE
OR
GRASS
WATER
MAP
OF THE
SEAT OF WAR
IN
FLORIDA
COMPILED BY ORDER OF
BVT BRIGR GENL Z. TAYLOR,
principally from the surveys and reconnoissances
of the Officers of the US Army
BY CAPT JOHN MACKAY AND LIEUT J E BLAKE
. U S TOPOGRAPHICAL ENGINEERS
Head Quarters Army of the South Tampa Bay, Florida 1839
Scale of Statute Miles
0 10 20 30 40 60 Miles
By Transfer
OCT 3 1963

THE CITY OF MIAMI

MIAMI, renowned as a gay, metropolitan playground, is also a quiet community of individual homes and gardens, and is rapidly recovering from its spectacular, adolescent growth.

Before 1900 early settlers found the community clustered in a narrow space between Biscayne Bay and a jungle wilderness. The site of the Dade County Court House was a swamp inhabited by deer, wild turkey, and quail. Development of the city was slow until the decade that saw the World War, the popularity of automobiles, and the building of good roads, when it grew from a town of 5,000 to 30,000. During the next ten years over 80,000 people became residents of the city, and since 1930, 40,000 more have made the city their home.

Due to the optimism of early builders, whose scattered subdivisions crowded close on the edges of the rapidly receding Everglades, many areas within the city limits to the west and north are still undeveloped. Wide stretches of vacant lots, overgrown with scrub palmettos, give these outlying sections a ragged, straggling appearance. However, the construction of modern landscaped avenues and new homes is closing these gaps as the city rounds out its youth and enters the years of its maturity.

To the east are the green-patched waters of Biscayne Bay and, beyond, bordering the Atlantic Ocean, is Miami Beach. Like a slender thread stretching three miles across the bay is the traffic-crowded County Causeway, one of three roadways connecting the two cities. The Venetian Causeway is at the foot of 15th Street, and farther north, the 79th Street Causeway reaches from the Little River section of Miami to the Isle of Normandy.

Miami's port and harbor facilities extend along the Miami River, which winds in a southeasterly direction through the city. They also occupy the bay front from Brickell Point, at the mouth of the river, northward to the steamship docks at 12th Street. Adjacent to the docks is the turning basin, accommodating all but the largest ocean-going vessels, and the Government Cut, a steamship channel paralleling the south side of the County Causeway.

Between the Royal Palm Docks and the City Yacht Basin is Bayfront Park beyond whose tropical verdure rises the lofty skyline of the downtown business section with its modern hotels, banks,

streamlined shops, and office buildings. Bordering upon this area, in a broad loop, is a wide band of apartment buildings, rooming houses, and smaller hotels, from which busy traffic arteries branch out into the residential divisions of the city and nearby communities. The business area, too crowded in the downtown limits, finds an outlet into Flagler Street, which is lined by shops as far west as 12th avenue.

The centralized character of the business area creates traffic problems which the engineers who laid out the first narrow streets could not have foreseen. Registered motor vehicles in Miami number more than 80,000, and when out-of-state automobiles increase this figure to approximately 200,000 during the peak of the tourist season, the problems are further intensified. To relieve the increasing congestion the city built new bridges across the river and widened its streets. Palm-lined Biscayne Boulevard and Coral Way, its broad lanes a long vista of banyan trees, offer easy access to the north and southwest sections respectively.

The circle on Northeast 13th Street, where the traffic lines of the County Causeway meet those of Biscayne Boulevard, presents a scene of the city's restless activity. During a twelve-hour period 52,766 cars and trucks have been counted at this intersection. The traffic peak is reached in late afternoon when during a one-hour period, 6,240 motor vehicles passed around the circle.

The residential sections, more densely populated in areas adjacent to the bay, lie between a westward curve of the bay shore on the south and 87th Street on the north, and adjoin the limits of Coral Gables at 37th Avenue on the west. Except for occasional apartment buildings, the residences are mostly one-story houses of frame, or concrete block. The more expensive ones near or overlooking the bay are usually two-story structures, some of which, especially those along South Bayshore Drive and South Miami Avenue, are located within walled estates. Flowers and shrubbery are abundant around most houses, however humble or pretentious.

Miami's 30,000 Negroes are employed chiefly as servants and manual workers, and their number is increased in winter months by an influx of approximately 1,000 chauffeurs, domestic workers, and hotel employees from other parts of the Nation.

The famed amusement facilities and bathing beaches of the Miami area are not open to Negroes. Their popular diversions are church entertainments and club activities, bolita and bingo gambling, and the traditional fish fries.

Among the Negro population are more than 5,000 natives of the Bahamas. These people retain many island customs and beliefs,

and resent prejudice against the Negro race, which was less severe in their homeland. They speak with a precise British accent, and differ from Florida Negroes in cultural background. The majority were brought to Miami during the World War to serve as laborers in nearby vegetable fields.

The Negroes in Miami have become a pronounced social and economic problem, to which the city's rapid growth has added an ecological aspect. They reside in three restricted areas: one in Coconut Grove; one near the center of the city between Northwest Seventh Avenue and the Flagler East Coast Railway; and the third, known as Liberty Square built as a PWA project, on the north side of Northwest 62nd Street near 17th Avenue.

The original area set aside for Negro residence lay west of the railroad tracks on the edge of the town. As the city's population increased this area was completely surrounded. Meanwhile the narrow strip north of the business district lying between the railroad and the docks on the bayfront was occupied by wholesale and small manufacturing firms. As the city increased in size these firms were without room for convenient expansion since the Negro settlement covers the entire area west of the tracks adjacent to the wholesale section.

The Negro population likewise kept pace with the city's growth, and their settlement, overcrowded for years, characterized by rows of wretched shacks and worse living conditions, attended by unrest and disease, finally became a subject of acid controversy. The conflict became bitter when the Liberty Square Negro housing project was proposed. Despite the protests of white residents and owners of land in the vicinity, a 62-acre tract was acquired and 35 building units containing 243 modern housing units were built. Under Negro management this new settlement is a model of communal order and cleanliness. There is no active opposition against Liberty Square manifested now, and it is generally conceded to be a fine project. However, many of the white people in the neighborhood are making every effort to dispose of their homes, and a number of second-hand stores and junk dealers have moved into the vicinity.

The Latins and the Seminole Indians are relatively few in number and have no great sociological influence. Though many of the Latins live in a small area on the northern edge of the business district, and retain some of their customs and traditions, they are readily assimilated. They experience little racial antipathy and find employment in widely divergent lines of endeavor.

The Indians, except those exploited in villages in or close to the

city, live mostly in the back country and appear on the streets only when they need supplies. Even those in the commercial villages remain a people apart, making curios and sometimes guiding hunting parties into the Everglades. They do not sell to tourists; their products are sold in curio shops owned by white men but there are a few places several miles from Miami on the Tamiami Trail where curios may be bought from Indians at their camps. Although Miami draws a cosmopolitan group of visitors, the bizarre, colorful costume of these Indians rarely fails to excite interest.

The cultural background of Miami's population, which is drawn from all states and many foreign nations, differs greatly among individuals and groups. Clubs, societies, and kindred organizations make special efforts to provide opportunities for their members to participate in community life. Prominent among such agencies are the churches, which number 131 in the white area and 59 in the Negro section. Besides the national fraternal organizations, which are well represented, there are numerous State clubs as well as philanthropic and scientific societies.

While these organizations serve spiritual and social needs, the fluctuating population intensifies economic problems that are the deep concern of industrial, labor, philanthropic, and government relief agencies. In autumn the van of incoming travelers includes many whose stay in the city depends upon their employment. They come in such numbers that local wages are often depressed to a substandard level. Skilled labor has succeeded in securing the passage of city ordinances requiring occupational licenses for electricians, plumbers, carpenters, and painters, and is thus afforded a measure of protection, but unorganized labor still suffers from this seasonal influx of workers.

In past years transient workers were rounded up by the police on their arrival in Miami, carried in trucks to the county line, and admonished to seek employment elsewhere. This "hobo express," as it was called, was later adopted and enforced along the northern borders of the State in winter months.

Out of Miami's 170,000 population approximately 3,000 are engaged in industry and business, while over 50,000 are employed in other lines, chiefly in retailing. The city, although keenly interested in the development of industry and agriculture in the surrounding area, is still almost wholly dependent upon its tourists.

During the six-month period from October, 1937 to March, 1938, the city provided accommodations for 796,000 visitors from other states. Housing facilities in Miami proper include 186 hotels, 978 apartment buildings, 1,157 rooming houses, numerous camp cottages, and individual homes available for lease.

In September the city begins preparations to receive its guests. Hotels and restaurants, many of which close during the summer, throw open their doors. Colorful souvenir bazaars offer Indian curios, tropical shells and nuts, and cooling fruit juices, and smart shops display newest vogues in dress and beach attire. By December the city is thronged with health-seeking and pleasure-bent thousands.

For them Miami provides a wide variety of attractions. Bathers line the 10 miles of beaches. Fishing in the bay and Gulf Stream offers the angler anything from a two-ounce "grunt" to a two-ton devil fish. Golf courses, tennis and shuffleboard courts are located in many parts of the city, as are the parks and night clubs. In Miami proper are 24 motion picture theatres with a seating capacity of over 25,000. Pari-mutuel betting is legalized at the jai-alai (hi-li) games, the three dog tracks, and at the two racing meets held at Tropical and Hialeah parks. During the 1937-1938 season pari-mutuel betting totaled more than $44,000,000 and the attendance was approximately 1,000,000. Visitor expenditures in the greater Miami area are estimated at $60,000,000 annually.

Miami is too young to have figured in the founding of the Nation, and has but few historic shrines and traditions. While the city may become increasingly important as a manufacturing and distributing center as the back country is developed, its growth and present popularity as a resort is due primarily to the energy and hospitality of its citizens, its salutary climate, and its advantageous setting on the fringe of the tropics.

NATURAL SETTING

MIAMI, stretching for 15 miles along the shore of Biscayne Bay on the southeastern coast of the Florida peninsula, lies in approximately the same latitude as Calcutta, India, and the hot, arid regions of the Sahara Desert, but its climate partakes of the nature of neither of those places. As in other extended level areas, the twilight interval is brief and night closes in abruptly. Throughout the year, average seasonal temperature changes in Miami are so slight that the terms "winter" and "summer" have little significance and these seasons, differentiated by the amount of their rainfall, are more aptly called "rainy" and "dry." With these exceptions, Miami's climate is without parallel among cities bordering on the tropics.

The average annual rainfall is 65.5 inches, three-fourths of which falls during the rainy season extending from May through October. At least half of this annual supply is absorbed by the soil to become the chief source of the city's underground water supply. Most of the precipitation comes in the form of sudden showers lasting from a few minutes to an hour and usually confined to small areas having sharply defined edges. The heaviest rains occur in early summer and in the fall during the period of the equinoctial storms. During a 24-hour period, 15.10 inches of rain fell in Miami when a hurricane swept from the lower west coast and passed off the upper east coast in November 1935.

The tropical hurricane, a distinctive type of storm growing out of unusual atmospheric conditions, is known to scientists as a thermo-convective cyclone. In the Northern hemisphere most of these storms occur during August, September and October and their destructive effects are felt in the states bordering the Gulf of Mexico and the Atlantic seaboard.

Because tropical hurricanes degenerate rapidly and lose their characteristic form when they move inland, study of hurricane conditions is incomplete and little is known concerning their origin and development. Recent meteorological observations indicate that they may form anywhere above five to six degrees from the equator in regions of light winds, abnormal temperatures, and a high atmospheric moisture content. The first sign is a more or less clustered group of thunderstorms characterized by slightly subnormal pressures. Near the center of a large thunderstorm a vortex takes form, gains in size,

and, accompanied by excessive rains, gathers momentum until winds of gale force are frequently reached.

The whirling wind is sucked toward the center of the vortex where, warmed by condensation, it rises and flows out to be replaced by moisture-laden air from outside the storm. It is this heat, liberated near the center which maintains the structure of the hurricane.

The circular movement of the air attains, near the center, a velocity that involves extremely low pressures. This creates a downward movement of air which forms an "eye," or clear zone in the center. The eye, from five to 50 miles in diameter, is usually without clouds and within it, the air is calm.

Outside the clear zone, the winds, mounting to tremendous speed, are accompanied by torrential rains that merge with the spume blown from mountainous wave crests until, over hundreds of square miles, the air is filled with driving water.

Once established, this storm system moves slowly, first west and then northwest, after which, if it is not disturbed, it "recurves" to the north and finally to a northeasterly direction apparently moving around the westward side of the usual oceanic area of high pressure. Variations in atmospheric conditions, however, tend to give these storms erratic paths. For instance, a hurricane reaching the Gulf of Mexico will not move eastward unless a low pressure trough over the Atlantic States favors its recurvature.

If the hurricane moves inland, it encounters conditions unfavorable for the maintenance of its structure. The increased friction decreases its wind velocity, the moisture supply on which it depends for energy becomes restricted, and consequently the eye fills up as the wind system gradually collapses.

Since, during the past 60 years only one tropical hurricane of major intensity reached Miami, that of September, 1926, these disturbances are counterbalanced by the equability of other climatic factors.

The city, lying in the trade wind belt, is favored by an almost constant breeze from the east. These prevailing winds, tempered as they pass over the broad expanse of the nearby Gulf Stream, give Miami an average temperature of 68° in winter and 82° in summer. Extreme variations are so rare that heat prostrations are unknown. Between 1930 and 1940 temperatures in excess of 90° have been reached but five times.

The air, uncontaminated by gases, smoke, or dust, does not favor the formation of fog. Such fogs as have been observed occur in the

early morning, averaging about two days a year, and are rapidly dissipated by the rising sun. Coupled with the character of the prevailing showers, these conditions give Miami an unusual amount of sunshine. Since 1895 there has been recorded an average of but six sunless days a year.

Despite its favorable climate, the territory in the immediate vicinity of Miami is not adapted for general agricultural development. The whole area is located on a limestone formation, known as Miami colite containing as much as 95% of calcium carbonate, which extends from north of Broward County southward and southwestward along the coast to Cape Sable and across the shallow water to the Keys. Nowhere more than 25 feet above sea level, it contains many swampy areas, known as glades, some of which extend into the Everglades.

Because of its porous nature, this rock is subject to the dissolving action of water and has developed many curious formations. Arch Creek, north of the city, flows under a natural bridge which forms part of a highway. In another section, now covered by buildings, construction gangs removed the sand for railroad ballast, revealing an area honeycombed with vertical pits a foot or two in diameter. West of the city are several large caverns containing numerous stalactites.

This colite lies close to the surface and is frequently uncovered in wide areas. It hardens when exposed and has been found satisfactory for road materials, building blocks, and as a source of hydrated lime.

There is sufficient humus in the interstices to support considerable vegetation as is evidenced by the numerous outcroppings dominated by pines and wire grass. The pines are used locally for lumber and fuel but not for turpentine. The wiregrass areas might be used for grazing but the jagged rocky surfaces make this impossible.

South of Miami, in the Redlands section, these pine lands have been cleared, the surface scarified, and planted principally to citrus fruits. The lower ground toward the east has been drained and is intensively cultivated, potatoes and tomatoes being the chief crops. Water control has likewise made the rich, productive muck lands north and northwest of the city available for diversified truck farming.

South and west of Miami in the Dade County section of the Everglades is an almost inexhaustible supply of peat. It compares favorably with that used for fuel in other parts of the world but labor costs prohibit commercial production. At present it is used principally as a filler for nitrogenous fertilizers. In prolonged dry

seasons it becomes easily ignited and thousands of acres of this valuable material have been destroyed by fire as the result of carelessness on the part of hunters or sightseers.

The Everglades, formerly a Seminole battleground and refuge for rum-runner, black-birder, outlaw, and fugitive, has almost disappeared as the result of vast reclamation projects instituted by the state and Federal governments. This whole section was once a wet prairie, covering a strip 150 miles long and 55 miles wide, lying in a basin between two rock ridges. In some places the water had cut channels through these ridges but the fall was too slight for complete drainage. Since the annual rainfall over this territory averaged over five feet, and because it received the annual overflow from Lake Okeechobee, most of it was covered with water for 12 months in the year. Even in dry seasons the water was three feet deep in many places.

Scattered throughout this expanse of water were patches of higher ground called "hammocks" that were dry at all seasons and whose soil, being very productive, was gardened by the Indians. The lower, inundated lands were overgrown with a rank, almost impenetrable, growth of coarse grass having serrated edges from which it was named "saw grass."

A deposit of muck, rich in nitrogen content and enormously productive especially as regards foliage crops, covers most of the Everglades in a layer that varies from two feet in depth at the edges to as much as 20 feet in the middle. Experiments show that with proper drainage and fertilization these muck lands can be made suitable for many crops.

Reclamation of these swamp lands has been based on drainage systems of which the numerous canals in the vicinity of Miami are a part. Lowering the water table has reduced much of the adjacent territory to a desolate waste but not without benefit to the city. It has not only wiped out the breeding places of salt-marsh mosquitoes but the canals are navigable for small boats and provide anchorage for the numerous cruisers, large and small, that are brought to the city each season. The Miami and Comfort Canals, which are a continuation of the forks of the Miami River; the Little River Canal, an extension of Little River, also a natural waterway; and the Biscayne, the Coral Gables, and the Tamiami Canals are part of a vast network draining a back country that has been called "The Nation's Sugar Bowl."

All the canals empty into Biscayne Bay, a small body of water, approximately 40 miles long, which forms part of the connecting

water routes extending along the Atlantic coast from Boston, Mass., around the southern tip of the Florida peninsula and ending at Rio Grande, Texas. This sheltered passage, approximately 3,000 miles in length, is known as the Intracoastal Waterway. It had its beginning in surveys made by George Washington in 1763 but the project did not reach active development until 1911. The Norfolk-Key West section was completed in 1936.

Long before the Christian era, scholars in India spoke of a "Beam of Torture" or the "Beam of Crucifixion," referring to a constellation or cluster of stars arranged in the form of a Roman cross. The poet Dante called this group the "consecrated stars." It became involved in romantic folklore, legends, and religion. It has been credited with inspiring the Spanish and Portuguese to settle under its influence. This brilliant constellation, the Southern Cross, is visible in Miami during February, March and April. In the latitude of Miami, 25° 48′, it appears very low on the southern horizon and may be observed from points as far north as latitude 27 degrees.

MIAMI'S FRUITS AND FLOWERS

THE FLORA of the Miami region is essentially tropical in character but it includes many plants common to both the Middle and South Atlantic States. From the Keys and Cape Sable to the head of Biscayne Bay, the terrain is marked by a great diversity of soils which gives rise to a large variety of plants and, at the same time, sharply delineates the usual confines of the several plant associations. These areas of local distribution of plant species are known as "pinelands," "hammocks," and "Everglades." In addition, the waters of Biscayne Bay and the dunes along the coast have a vegetation that is peculiarly their own.

Palms, especially the coconut palm, are more widely planted in Miami than any other tree. Its usually curved trunk is topped with a rosette of leaves that bend outward and at the tips, abruptly downward. In tropical America the coconut often grows to a height of 100 feet, yields about 100 nuts a year, and supplies food, shelter, and clothing. It is less important in the latitude of Miami where its commercial use has been supplanted by its ornamental value.

The royal palm is another widely planted pinnate-leaved palm that thrives only in the southern part of the state. Its gray, spindle-shaped trunk, like a pillar of cement, is straight and topped by a long, green, cylindrical, sheathing base for the leaves. Long lanes of this stately tree line Biscayne Boulevard northward from Bayfront Park.

Another common tree belonging in this group is the Washingtonian or "petticoat" palm distinguished by a dense sheathing of dead leaves hanging downward along its upper trunk.

Scattered widely over vacant lots throughout the city on dry or pineland soils is the scrub palmetto. Although these dry soils are frequently swept by fires, the underground stem of this palm protects it against damage.

The Australian pine, widely planted in the past as an ornamental tree, grows tall and plume-shaped. It may be pruned into almost any shape for use in formal gardens, as in the old Royal Palm Hotel gardens at Southeast Second Avenue and Second Street.

The native Caribbean pine, scattered over much of the undeveloped lands in and about Miami, is distinguished by its rough, branchless trunk and rounded but ragged looking top.

Rows of young almond trees adorn both sides of Seventeenth Avenue north of Miami River. The large leaves, growing close to long slender branches radiating horizontally from the trunk, take on a rich, red color in cool weather.

A baobab tree, (*dansonia digitata*) imported from Africa in 1912 stands in Columbia Park in front of the Miami Senior High School. The trunk of this specimen is beginning to acquire the characteristic bulge for which it is noted in its native habitat. A rarity in Florida, this tree, late in summer, bears huge creamy white blossoms that are remarkable for their strange shape.

South of Miami River, Brickell Avenue as far as Fifteenth Road, is lined with black olive trees, an importation from Jamaica. The black olive is a rapid grower with small, dark-green leaves forming a fine, round-topped tree something like the sugar maple. Older trees of this variety border Lummus Park on Northwest Third Avenue between Second and Third Streets.

Brickell Avenue, which extends southward to the James Deering estate, was originally cut through a hammock covered with a dense jungle growth. Many fine specimens of the gumbo limbo, the strangler fig, and the live oak may be observed in this area.

The gumbo limbo, sometimes known as West Indian Birch, has smooth copper-colored bark that may be peeled off in thin sheets. Glue and varnish are obtained from the tree which also yields an aromatic gum.

The strangling or strangler fig (*ficus aura*), belonging to the same genus as the edible fig and rubber trees, derives its name from its peculiar habit of growth. It may start from a seed germinating in the ground but, since the fruit is favored by birds, the seeds are frequently lodged in the bark of some forest tree, often the cabbage palm. In such cases the seed sends to the gound slender roots that branch, grow, and merge with one another, until the trunk of its host is completely encased and eventually killed. This fig, like the wild banyan (altisima) seen along the newly landscaped Coral Way, drops aerial roots that become props for the lower limbs. The leaves of the fig are narrowed at the base; those of the wild banyan are rounded.

The majestic, wide-spreading live oak (*quercus virginiana*) frequently draped with Spanish moss, is the largest member of the beech family and is usually confined to hammock lands. It is distinguished from the smaller myrtle-leaved oak (*quercus myrtifolia*), which also grows in hammocks, by its larger leaves and nuts.

South Miami Avenue, just west of Brickell Avenue, is lined on both sides for a considerable distance with royal poinciana trees. In June their spreading, umbrella-shaped tops are transformed into can-

opies of flaming scarlet blossoms. The center parkway of this avenue is planted with Phoenix or date palms.

Near the James Deering estate on Miami Avenue is a planting of Spanish bayonets. The plant has no trunk; the strong leaves are clustered at the base, diverge, and terminate in sharp points. The flowers, about three inches across, are borne on stems from three to ten feet tall and apparently attract only one insect, the yucca moth. This moth lays eggs in the capsule and crowds collected masses of pollen into the stigma, thus fertilizing the ovules. The larva uses a few of the seeds for food, spins a thread to the ground, enters the pupa state, and emerges as a moth when the flower blooms again the following year.

Among the climbing plants is the flame vine, a native of Brazil, which is widely planted throughout the city and especially in Coral Gables. Its light-green foliage and brilliant clusters of deep pink flowers, appearing in early winter make it easily recognizable. Another vine is the bougainvillea, a woody, thorny plant adapted for many uses. The purple varieties, strong and dense of growth, lending themselves to mass effects, are easily trained, and often used for hedges. The red varieties, are more effective when trained against a white background. They are frequently used to soften the effect of barren wall areas, especially at Miami Beach. Other common ornamental vines are the yellow allamanda and the thumbergia with lavender-blue orchid-like flowers.

Of the shrubs, the hibiscus or rose mallow, is more widely planted than any other excepting, possibly, the croton. Three varieties of hibiscus are popular, the (*H. rosa sinensis*) being the most common. This native of China is a vigorous shrub or small tree adapted for hedges but is often planted singly. The petals are rose-red. A smaller variety (*H. Sabdariffa*) has dark red flowers. The *H. cannabinus*, more difficult to cultivate, has white or pink, sometimes darker colored petals, that shade to purple at the base.

The croton, a shrub from one to six feet in height, is a member of the spurge family, a group remarkable for its foliage rather than its flowers. The leaves of the cultivated croton are generally green, often splashed with brown, red, or yellow in varying shades. Rare plants, especially new cuttings, sometimes have yellow leaves. One plant may put forth leaves that are erect, broad, and wrinkled; another may have smooth, drooping leaves that are less than a quarter inch across. The "corkscrew" croton is marked by the twisting habit of its leaves.

The plants of the spurge family, like the croton and the poinsettia, often have a milky sap and yield a variety of products including edible fruits, medicines, poisons, and rubber. The cultivated

poinsettia, a woody plant with dark green leaves and scarlets bracts, has a group of less conspicuous relatives sometimes called "wild poinsettias," or "hypocrites." They are smaller plants that show the same brilliantly colored bracts and may be found on pineland or in gardens.

Another common shrub is the oleander which sometimes reaches a height of 30 feet or more and is found along boulevards and in gardens everywhere. Collins Canal at Miami Beach is bordered with oleanders having pink blossoms but other varieties show colors including white, rose, and red. A native of the Levant, the oleander is a member of the dogbane family.

Many plants of this family are poisonous as the termination "bane" indicates. The pink and the white periwinkle, growing unnoticed in back yards or vacant lots, belongs to this group. The blue periwinkle of Europe, often planted in the North, is sometimes called "the flower of death."

After the sun goes down, the small white blossoms of the night-blooming jasmine, closely related to the well-known yellow jessamine, send out a penetrating odor of cloying sweetness. This plant also belongs to a family of poisonous plants. Its Asiatic cousin, *strychnos nux-vomica,* yields strychnine and another supplies the virulent poison for the arrows of savage hunters.

Among the commoner air plants is Spanish moss which, besides softening the beauty of rugged live oaks, is the source of a "vegetable hair" used to fill mattresses. Spanish moss is not a parasite. It has no roots but takes its food from rain and air by means of hairlike structures. It belongs to the pineapple family as do also the wild pines which, having clustered leaves, are more characteristic of the cultivated pineapple. The leaves, at their bases, catch rainwater and dust on which the plant feeds.

The phlox, petunia, marigold, sweet pea, and a host of other flowers that flourish in the North in June, bloom in Miami during the winter months. These annuals of the temperate zone are really the exotics of this tropical area but they may be successfully grown by careful tending.

Miami is the meeting place of the plant zones. Southward extends a country that, in its natural state, becomes increasingly tropical in types of vegetation. The Everglades has a flora that is peculiarly its own and northward the plant life changes to that of the south-temperate zone.

Although most of the rainfall occurs during the summer, there is sufficient precipitation together with a relatively warm temperature during the winter to remove seasonal habits and extend the growing and flowering time throughout the year.

FAUNA OF DADE COUNTY

THE ZONE of Florida fauna begins in the Everglades west of Miami and occupies the remainder of the peninsula, while the mainland, or north Florida, lies in the zone of Louisiana fauna. What is designated as the tropical life zone is contained in a narrow strip of land extending from Jupiter southward along the lower east coast, including only a small portion of the Everglades and lower west coast.

Much of the tropical zone is coastal land or low, marshy ground in which water birds abound. Besides the gulls and active little sandpipers, the most common water birds are the brown pelicans. Their nearest breeding places are Cape Sable and Brevard Island.

The flamingo, vermilion scarlet in color, with a wingspread of five feet, once common in Southern Florida, is seldom seen out of captivity.

Dr. J. B. Holder, author of *Along the Florida Reef* (1871), observed many "snake birds" on his trip to this area, which dived and disappeared when approached. He decided that they plunged to the bottom where they grasped weeds to hold themselves under until danger had passed. These strange birds, known as water turkey, snake bird, and American darter, swim with their bodies submerged, only the long slender neck and serpentine head showing. The plumage of the male is a glossy greenish black, with its broad tail tipped with pale brown. The female has much the same coloring, but her head, neck, and breast are grayish buff. They are seen perching in low trees or bushes overhanging the water from which they feed.

The egrets, now rigidly protected, are becoming more plentiful. The "aigrettes" for which they were hunted are long white plumes resembling spun glass, that grow out from the bird's back during nesting season. Their gregarious habits make them easy prey for hunters but their slaughter left the young birds to die.

Egrets, herons, and cranes inhabit the swamps and edges of the canal along the Tamiami Trail. With them in the Everglades is the ibis, held by the ancient Egyptians as sacred to Thoth, god of wisdom. Wild turkey and quail are found in the Everglades, but the crow and vulture are much more common.

Wild hogs, once common to the prairies, are said to have been descended from animals imported by Spanish exploring parties. When President-elect Herbert Hoover visited Brighton, to receive a delega-

tion of Indians from the near-by reservation, the braves alone appeared. Their leader apologetically explained that wild hogs had been reported that morning and the women could not resist the opportunity to secure fresh pork for their tables.

There are no land animals or birds in Florida today, that have any great commercial value. They are preserved or protected either for sentiment, for study, or for sport, and for the less tangible economic value arising from the benefits obtained through a balanced natural life.

Although some forms of animal life are becoming scarce, the deeper Everglades is still a paradise for hunters. In October, 1933, William T. Belvin, former preacher and boilermaker of Fort Myers, returned from an exile in the Florida wilds where he voluntarily spent a year to prove that it was possible, even in these days, to live in primitive fashion. Belvin, who took with him neither clothes, tools, nor weapons, lived on fish and wild game which are the main foods of the Indians who now inhabit these same wilds.

Only two species of alligator are known to exist in the world. One is found in the region of the Yangtze Kiang River in China and the other in southeastern United States. The American species are thick, dark brown or black, sluggish animals that favor fresh water and spend much of their time basking in the sun on open banks or on logs. They grow to a length of 16 feet but specimens over 12 feet are now rare. Like most wild animals they recognize man as an enemy and, when approached, will attempt concealment by hiding in holes or "caves" which they dig in or near the water. They are not noisy except during the breeding season when the male utters a roar that may be heard a mile away. The female builds a crude nest six to eight feet in diameter, lays 20 to 40 eggs, and covers them deeply with vegetation that ferments and liberates heat which hatches the eggs after two months. The emerging young, about eight inches long, are usually taken for disposal to tourists but most of them die from want of proper care. In the Everglades they add nearly a foot to their length the first year. By the fifth year they average about six feet and weigh approximately 70 pounds.

The crocodile inhabits the salt marshes of southern Florida and is a vicious animal that will often move to attack instead of hiding as does the alligator. The more active crocodile is grayish in color and has a triangular head with a pointed snout. It is the largest survivor of the reptile age.

Another survivor of life that swarmed in ancient oceans millions of years ago is the garfish or Everglades pike that throngs the waters of the Miami River and nearby canals. Like the reptiles, the verte-

brae of the gar have ball and socket joints and the head moves on its neck independently of the body. The scales, so hard that fire may be struck from them with a piece of steel, form a veritable armor. These scales do not overlap but are laid side by side like metal plates and are fastened to each other with a system of hooks. It is said that pioneers used gar skin to cover wooden plows and that the savage Caribs, when they went to war, used this armor for breastplates.

The third staple of Indian diet, the gopher, is a land tortoise which, being composed mostly of shell and digestive organs, is little more appetizing than the gar. The shell of a full-grown gopher is 18 inches long but the Seminoles hunt them so assiduously that smaller specimens are the rule. They are found in dry, forested elevations where they excavate large burrows in the ground. In the vicinity of Miami, where the limestone rock lies very close to the surface, the gophers are adept at finding pot holes, or "sand seeps," in which they dig their underground homes. Numerous beetles, crickets, and even toads share these underground chambers which are often 20 feet long and reach a depth of eight or nine feet. The gopher burrow may be recognized by a low mound, a foot or more higher than the surrounding land, and extending to a diameter of 10 or 15 feet.

The banks of the Miami and adjoining canals still abound in snakes which are hunted both for their skins and for medicinal purposes. Only three poisonous snakes are known, the coral snake, the diamondback rattler, and the moccasin.

The moccasin, or cotton mouth, rarely found far from the water's edge, is a stout snake, about four feet long at maturity. When striking, its widely opened mouth shows cottony white. The body is a dark copperish brown and its lips usually marked with white. It is frequently found on a log or in a low bush, hanging over the water, ready to drop on some fish which it pursues under water with remarkable speed.

The coral snake, its body covered with brilliant rings of yellow, black and crimson, is smaller and although one of the deadliest, is generally less dangerous because its fangs are shorter and it cannot strike so deeply.

Although game is less plentiful than it once was there are still deer, quail, and turkey for the sportsman. Bears climb and tear the tops out of palmettos to get at the tender cabbage. Indians trap muskrat, mink, otter, and raccoon for their fur. Panthers, which inhabit the desolate wastes, are rarely seen and still less often hunted. The lowly 'possum, also found in the Everglades, is the only North American animal that carries its young in a pouch.

Still less conspicuous than the game are the great land snails and their close cousins, the arboreal species that live in dense hammocks where shade, concealment, moisture, and abundance of food are favorable for their existence. They are rarely found in pinelands due, perhaps, to the frequent fires that sweep these areas. The common arboreal snail has a white shell marked with brown but the colors and patterns vary widely. In size the shell measures from one to one and one-half inches in diameter and up to two and one-half inches in length.

Within the city limits along the bayshore two species of crabs are encountered. The little fiddler crabs swarm in backwater mud flats where odorous, decaying vegetation provides food. Their name is derived from the peculiar motion which the male makes with his one large arm when threatened or disturbed.

The larger West Indian land crabs found from West Palm Beach to Cape Sable, are more annoying and destructive. Their wide-mouthed burrows and their attacks on tender plants make them a nuisance to gardeners. Automobiles kill thousands of them on hard-surfaced coastal roads every year and sometimes these casualties mean trouble for the motorist. One claw is greatly developed and sharp enough to puncture a tire. In a fight with another crab this great claw may be wrenched from the body without much harm but the slightest damage to its shell means death. They have been known to steal articles of clothing that unwary bathers leave on shore, even extending their efforts to shorts and shoes which they attempt to pull into their holes. In September, during what is believed to be the mating season, they leave their burrows in swarms and go on a wild, noisy spree, taking possession of yards and porches, clumsily clambering up walls, and filling the night with an everlasting clatter.

Sometimes the waves wash ashore the iridescent violet or blue inflated sac of the Portuguese man-of-war, a common marine animal that is often annoying to bathers. It resembles an elongated soap bubble topped with a crest which acts as a sail. Attached to the sac are a number of organs and tentacles, streamers often 40 or 50 feet long, some of which are provided with stinging or lasso cells that inflict severe pain when contacted.

The Florida manatee, or sea cow, which attains a weight of 2,000 pounds, grazes on grass growing in shallow lagoons and estuaries along the coast. The rear limbs are missing and the fore limbs are broad flappers. Its skin is bare, except for scattered hairs while the muzzle is covered with bristles. Nursing mothers rise to the surface and, head and shoulders above water, hold the young manatee to their breasts in an almost human fashion.

Even the soil produces strange fauna. Captain Charles J. Rose, one of Miami's oldest pioneers, possesses a large copper kettle inlaid with gold, product of the Aztecs or Spanish artizans, which was completely imbedded in rock blasted from a canal bed near the mouth of the Miami River. This rock, sometimes known as "ojus," is the same as that which underlies all the Miami area and is formed from the calcareous secretion of marine zoophytes or corals. These minute organisms build continuously and, over a period of years, their work is readily noticed. A one-inch specimen placed under water by Dr. J. B. Holder, doubled in size in a year's time. The same writer observed that branch corals sometimes grew five or six inches in one year.

Three small animals, the five-lined skink, the scorpion, and the chameleon, are common to yards and gardens throughout the city. The Cuban and Jamaican chameleon often reach a length of 16 inches but ours rarely exceed six inches. These slender lizards, noted for their rapid color changes, live on insects and drink dew. Changes in color are due to changes in light, emotion, and temperature. On cool days they are usually a dull gray, on warm days a golden green. Exposure to direct sunlight induces a dull black but in darkness they take on a cream color. Fright tends to produce lighter shades, while anger deepens the hue of lighter areas.

Young skinks are marked by five longitudinal stripes and a tail of brilliant blue. These lizards are harmless, active, and difficult to capture. The female becomes brownish at maturity and reaches a length of seven inches. The male attains a length of 10 inches and acquires a head of blazing red.

In the tropics, the scorpion's sting is sometimes fatal but the scorpions found in the United States are not dangerous except to children when their sting may cause vomiting and convulsion. This crab-like creature, black or gray in color, has a long, segmented tail tipped with a slender, curved sting. When alarmed the tail is curved over its back and the sting points forward in a threatening manner. The poison has a paralyzing effect.

Another common resident in the garden shrubbery is the Florida cardinal, often called the redbird. The crested head and underparts of the male are deep vermilion; the female is rusty brown.

The Florida blue jay is a crested bird found in central and southern Florida. It is slightly smaller than the southern blue jay and the upper plumage, suffused with gray, has a less purplish cast. It has all the bad habits of the southern blue jay but is less wary and can be trained to eat from one's hand. A noncrested bird, the Florida jay, or "scrub" jay, is found in scrub lands and sand-pine areas. Its

nape, rump, and wings are blue and it is easily recognized by its longer tail. The scrub jay is more of a songster than the Florida jay and is generally less noisy.

The mockingbird is soberly dressed but its cheery, rollicking song is the most prominent and best loved of southern birds. It is silent most of the fall and early winter but from January onward its persistent medley of calls, often interspersed with imitations of other birds, make it easy to recognize. So great are its powers of imitation that birds kept in captivity have been known to mimic cats, dogs, and chickens. Morning is its favorite time for singing but it often wakes at night when the moon is bright to pour a cascade of silvery notes into the starry silence.

Recognizing the beauty of its song, the Senate designated the mocking bird as the State Bird of Florida by a resolution passed April 23, 1927. Evidence pointing to a weakness in character has been gathered by the late Dr. Charles T. Simpson, noted author and student of wild life who observed mockingbirds become intoxicated when they eat berries of a plant bearing the name, *solanum seaforthianum.*

Inroads of civilization and drainage of the Everglades have greatly reduced the abundance of all kinds of animal life in Dade County. Alligators have been hunted relentlessly. The flamingo, once common, is now rarely seen except in captivity. In 1892 one man reported that he had shipped 130,000 birds out of the state for millinery purposes. Birds were hunted to such an extent that a colony of hunters, located on the Keys, won the name of "Redbird City." Many birds, such as the egret, barely escaped the fate of the wild pigeon.

The enactment of game laws and the work of the National Association of Audubon Societies resulted in the preservation of these birds and other forms of animal life. The Florida Federation of Women's Clubs secured the establishment of Royal Palm State Park, a sanctuary of 1,920 acres in Dade County.

EARLY INHABITANTS

AT THE time that white men began exploring and colonizing Florida, the state was occupied by a number of Indian tribes somewhat closely related but speaking different dialects. Though living in villages, they were somewhat nomadic, due perhaps to occasional floods or to seasonal journeys for food. Their diet consisted mostly of fish and game supplemented by fruits and vegetables. Being a "canoe" people, most of their villages were located near bodies of water as is evidenced by the large number of mounds found along the Gulf and the Atlantic coasts as well as the streams and lakes in the interior of the state.

Study of these mounds reveals that the peninsula was divided into two archeological areas. Tribes of Timucuan stock held that part lying north of Lake Okeechobee while the Calusas dominated the southern end of the state, part of the east coast, and the Florida Keys. It is probable that the Calusas had some contact with the people of the West Indies but all the prehistoric sites in this area are related to those of the Indians occupying the Southeastern States and it is believed that these early inhabitants came into the peninsula from the mainland rather than from the islands.

Some of the mounds examined are stratified showing several layers of sand, muck, marl, or stone containing definite evidence of successive periods of habitation. Yet, except for articles of European manufacture, even the largest of these mounds show but very few cultural changes from bottom to top, indicating that the migration of Indians to the peninsula took place at so late a date that there was no time for marked cultural changes to develop.

No great age can be attributed to any human remains thus far found in Florida. While it is true that many of the skeletons taken from Calusa mounds are fossilized and embedded in stone, numerous articles of European manufacture are likewise found with them. In spite of the fact that some remains have been found on sites as much at three feet below tidewater, archeologists are unwilling to admit that any people lived here more than a few centuries before white men appeared on the scene.

A large number of skeletons were removed from a mound at the mouth of the Miami River when that location was cleared for the erection of the old Royal Palm Hotel. As the east coast was developed

many other mounds were destroyed when contractors drew sand and shell from them for building purposes.

It was not until 1933 that an extensive archeological project was launched in Dade County. In 1934 over 3,000 specimens of burial materials were taken from mounds at Miami Beach and Opa-Locka and removed to the Smithsonian Institution for study.

Practically all the skeletal material was badly decayed and its preservation presented a great deal of difficulty. Most of the bones were so soft that they could be crumbled in one's fingers. The smaller bones and teeth were generally missing. Among the articles most frequently found were bone pins, celts of shells, some having a very keen edge, and egg-shaped plummets that were encircled by a shallow groove.

Fragments of pottery, showing a basketweave design, were found in the Miami Beach mound. Some authorities believe that the decorations were stamped on the clay with a wooden paddle before drying while others suggest that the Indians first plaited baskets of palmetto leaves and daubed the inside with clay. When fired, the basket would be burned leaving its design on the hardened clay. Pottery making was a poorly developed art due, for the most part, to the absence of suitable clay.

Stone was likewise lacking and such few stone articles as were found are believed to have been obtained by trading with tribes to the north. Most of the weapons unearthed were of shell or bone.

While it is known that these tribes used bows and arrows, no specimens were found. Such items, including spear handles, remains of houses and articles of dress, are rapidly decomposed by bacterial action in the soil and all traces of them have been lost.

The only written information concerning the habits and customs of the Calusa Indians is found in the incomplete and conflicting reports of early travellers and explorers who visited this section.

Escalante de Fontanedo, the only survivor of a Spanish vessel wrecked on the Florida Keys in 1545, was the first white man to spend any time in south Florida. During the 17 years of his captivity among the Calusas he was permitted to explore the peninsula and visit the camps of various tribes.

At that time, the Florida Keys were known as the Martyres. Fontanedo mentions two towns, Guarugunve and Cuchiyaga, which were located on these islands. The first name means the "town of weeping" and the second, the "place where there has been suffering." The islands have tentatively been identified as Matecumbe and Indian Key but other keys also show signs of early habitation.

The Indian men wore no clothing except a breechcloth of woven

palm while the women covered themselves with Spanish moss which Fontanedo described as "certain weeds that grow on trees."

Their common food was fish, lobster or crayfish, turtle, and snail. Flesh of the "sea-wolf" was reserved for the food of chiefs and nobility for those Indians recognized a higher and a lower class though particulars are lacking. Deer were plentiful as were also raccoons which fed on fish and oysters along the coast. On these inhabited islands, fruits of many kinds were likewise abundant.

The territory of Carlos, word signifying a fierce people, lay on the lower west coast and mention of this tribe first appears in the journal of Ponce de Leon in connection with his early expeditions. These Indians, noted for their bravery and skill in war, controlled the Calusa federation occupying a region extending northeastward to a town called Guacata on Lake Mayaimi in the interior. They also apparently dominated several tribes situated on the middle East Coast.

Fontanedo related that the Indians of Cuba had a superstition regarding a mythical river in Florida, the Jordan, that was supposed to restore youth to those who bathed in it. A long time before his captivity, many Indians from Cuba came to Florida in search of the river. They were subjugated by King Senquene, father of Carlos, and their descendants still lived under the son Carlos, who, during Fontanedo's captivity, was chief of the Calusas. The legend spread until all the Indians came to believe that the Jordan actually did exist and there remained no river, brook, or lake in the whole land in which they did not bathe.

The Tequesta branch had several towns on Biscayne Bay and a few on the banks of the Miami River said to issue from a lake described as an arm of Lake Mayaimi. Buckingham Smith, American historian and philologist, identifies this second lake as the O-ki-cho-bi, "big water," of the Hitchitis, and the "we-wa thlok-ko" of the Muscogees, Indian people who later came into the peninsula.

The rocky ridge along Biscayne Bay was bordered on the west by a vast inland basin extending westward and northward to these lakes. In reality, the whole region was, for the most part of the year, one great body of water covered with a dense growth of man-high sawgrass. Hammocks, rising like low islands here and there on this water-filled prairie, were visited regularly by the Indians when they sought certain roots from which they made a bread. These roots, known today as "coontie" were a food staple but the Indians preferred game and fish rather than fruits and vegetables.

From the falls of the Miami River, a series of rock ledges forming rapids at the western rim of the colitic ridge, to Lake Okeechobee were a number of Indian towns located on the higher hammocks and

on the shores of the lake. The inhabitants, including the Tesquestas, paid tribute to Carlos in the form of food, skins, and other articles.

Dade County, until 1900, extended along the east coast to the northern end of Lake Okeechobee. It included Jupiter Inlet, the land of the Jaega, where Jonathan Dickenson with his family, was wrecked in the year 1696. Fontanedo does not say that these Indians were of the Calusa federation but it is known that the area about Belle Glade was occupied by the latter and from the description given by Dickenson there was no material difference in their culture.

Studying the works of previous writers, the archaeologist, Daniel G. Brinton, concluded that the Tequestas were an independent nation extending their domination northward along the east coast to Cape Canaveral, land of the Ais. However, about the year 1553 some ships of a Spanish fleet were wrecked on the coast near this cape and, although discovered by the Ais, Fontanedo relates that jewelry and bars of silver and gold were divided by Carlos among the chiefs of Ais, Jaega, Guacata, and others. If the Calusas or the Tequestas did rule these coastal peoples, their influence died shortly after Pedro Menendez de Aviles, founder of St. Augustine, called an Indian council together near Cape Canaveral in 1566. From that year, when 1,500 Indians gathered to hear the Spanish leader, the Ais and nearby tribes were in continual difficulties. For more than 150 years they were harried by wars and disease and in 1728 they disappeared from historical records.

The fate of the Tequestas is even less certain. Menendez, who was introduced to Chief Tequesta by the Ais, built a fort at the town of Tequesta in 1567 leaving a priest and 30 soldiers at the settlement. In 1568 the Spaniards accidentally killed an uncle of the chief who then burned the settlement and fled to the Everglades. The Indians returned to attack the garrison but most of the soldiers escaped and retreated to St. Augustine.

When Menendez left Biscayne Bay, he took with him for religious training, Tequesta's brother and two subchiefs. The chief's brother was returned to his village late in 1568 and friendship with the Spanish was renewed. During the same year the Jesuits erected another mission at Tequesta. The subsequent fate of these missions is unknown.

During the years that followed, the name Tequesta disappeared. When the Jesuits again established a mission San Ignacio, at what is now Coconut Grove, in 1743, they wrote of the Miami River as the Rio de Ratones, "River of Rats," and the Indians as the Miamias. On their arrival, the Fathers learned that the Santaluces, a people to the north, were preparing to sacrifice a child to cement a bond of peace lately established between these two tribes, and hurrying to the place of ceremony, persuaded the savages to abandon the ritual.

According to one Lopez de Velasco, when a Tequesta chief died the largest bones were removed from his body and placed in a box for adoration by his bereaved subjects. At the time of burial all his servants were put to death. The death of a chief's son was likewise marked by human sacrifice.

What happened to the Tequestas is a matter of conjecture. Father F. X. Alegre, speaking of the Martyres, says that in 1743 these islands were inhabited by Indians having Calusa and Tequesta ancestors. Beginning in 1703, the constant pressure imposed by invading Creek Indians and other northern tribes, who were pressed southward by the English, and the declining power of the Spanish combined to drive the Timucuans down the peninsula forcing the few remaining Calusas and Tequestas to the Islands. In 1763 the last remnants of this federation, about 80 families, were removed to Havana under the protection of Spain.

The invading Creeks, who later came to be called Seminoles, in Florida, were a group of small or vagrant tribes many of whom were brought into Florida by English governors when they attacked Spanish settlements. They absorbed most of the Yemassee and Uchee tribes who were loosely united with the Apalachicolas in north Florida.

The Creeks gradually became the more numerous and their language predominated to such extent that the Seminole dialect does not differ greatly from the Creek and today most of the Indian geographic names in Florida are of Creek or Seminole-Creek origin.

Florida Indians became a border people clinging desperately to game lands which were rapidly disappearing on the fronts of colonized areas. Their wilderness strongholds became a refuge for escaped slaves whom they held in bondage. They became involved in numerous difficulties as slave owners and unprincipled men joined in wresting from them these slaves and, later, the descendants of such slaves. When Florida became a United States possession it was estimated that the Seminoles numbered 5,000, most of whom were captured and sent to western reservations during the Seminole War. At the close of the war probably not more than 100 men were left alive in the 'Glades.

SEMINOLES, PAST AND PRESENT

THE Seminole Indians found in Florida today are descendants of the Creeks and other closely allied tribes who united with fugitive Negro slaves from the early English and Spanish colonies, and, driven southward by warfare, eventually absorbed the straggling Indian groups that remained in south Florida. These Indians live in the southern part of the peninsula and are scattered over eight counties: Dade, Monroe, Collier, Broward, Hendry, Glades, Okeechobee, and St. Lucie.

They are officially listed as the remnant group of the Seminole tribe. In 1832 the United States government began its efforts to transfer the Florida Indians to reservations established west of the Mississippi River. These efforts precipitated the Seminole War and while several treaties were negotiated with the Indians during that war it is apparent that the signatories on one side were without authority, and many Indians, despite the treaties, objected to removal and successfully evaded capture.

When it was evident that the spirit of these remaining Indians was broken, the government withdrew the army. No treaty with them or their offspring has ever been signed and the Seminoles of today are, strictly speaking, *neither citizens nor legal wards of the government. The state constitution of 1868, Article XVI, gave the Seminoles the right to elect one of their number as a member of each house of legislature, but in the constitution of 1895 they were not mentioned. The Florida Indian is not regarded as a citizen of this state despite the fourteenth amendment and a court decision supporting the Indian's right to citizenship. They are not assessed for taxes. The state issues a special automobile license free to those who live on reservations.

Attendant upon the state's increasing population and opening of homestead lands to new settlers, the government from time to time set aside certain state lands as Indian reservations under the jurisdiction of the Seminole Indian Agency at Dania, Florida. In 1936 these were: 2,613 acres in northeastern Glades County; 2,200 acres in west central Martin County; 23,040 acres in southwestern Hendry County; 960

*Amendment of U. S. Constitution XIV, Sec. I; Title 8, Sec. 2-3, Acts of Congress 1924—"All Indians born in the United States are declared to be citizens of the United States."

Road Along the Bay

Australian Pines

Royal and Coconut Palms

Indian Creek, Miami Beach

William K. Vanderbilt Estate, Fisher Island

Seminole Doll Makers

Seminoles on Tamiami Canal

Seminole Indian Camp

Seminole Children

Flamingoes at Hialeah Race Track

Snowy Egret

Scene in the Everglades

Birds in the Everglades *(Copyrighted)*

acres in east central Collier County; 475 acres in Broward County; and 99,200 acres in southwestern Monroe County.

None of the reservation land has been divided into individual allotments, for while a few families desire small garden plots the Indians make but little use of their land, moving about from place to place as fancy wills. Their property is being held until such time as they decide to make use of it, and is not available for other use. There are no accommodations for visitors on any of the reservations.

The nomadic habits of the Indians and their aversion to leaving old haunts has hampered the development of work on the several reservations. Scattered over an area approximately 130 miles wide by 200 miles long, the Indians continue to live in the midst of desolate, inaccessible swamps. In number about 600, they are found in small groups or camps throughout the whole area.

Although they have much in common, including their tribal name, they speak two dialects. One part, about 200 in all, called the Muskogee or Okeechobee Indians, live in the areas north and east of Lake Okeechobee. The others, who inhabit the Big Cypress swamps and regions south and west of the lake are known locally as Miccosukies or Big Cypress. These are the Indians whose colorful costumes are seen in and about Miami. The Okeechobee Indians dress in much the same manner but because the majority have adopted the white man's garments, their attire is generally more sober, blues and browns predominating.

Although a few live in commercialized communities close to cities or well traveled highways, most of the Indians still prefer their old hunting grounds in the midst of the swamps. Due to vast drainage improvements covering most of the Everglades and to the inroads of white hunters, wild game is scarce and the Indians eke out an existence under wretched conditions.

The silk-shirted, pompadoured Indian of the commercial village, though retaining the habits and customs of his people, is not the Seminole of the hammock lands deep in the Big Cypress or sawgrass regions. The typical Indian camp lies far beyond the trail marked by the narrow dirt roads that branch off the highways and end in a world of prairie marshes. In this wilderness, too unproductive to attract white men, the Indian builds his "cheekee" and makes his living.

Building a cheekee, even with the tools he has been able to buy, is a long and arduous task. The corner posts, usually of pine, he must carry on his back and set in the ground. If he can, he secures tools for mortising and builds a well-constructed hip-roof. Slender poles laid across the rafters provide a base for the thatched roof of palmetto leaves. If he has money and can reach good roads by car or with

a canoe, he builds a sleeping platform of sawed boards within the cheekee; otherwise he raises a framework of thick logs and tops it off with rough planks laboriously hewed by hand. This simple hut, merely a platform and a roof, takes about two months to build for he must spend much of his time scouring the surrounding country for food.

If two or more families settle in one place, extra houses are sometimes built. A cooking shed, much the same as the cheekee but without the platform, is erected in most cases to protect the camp fire. From the roof of this shelter the squaw hangs her pots and pans, her drying meats and herbs, beyond reach of the ever-ravenous dogs, pigs, and thieving chickens. A high table for washing and sun-drying tinware, a mortar and pestle, and a small, hand-operated sewing machine complete the average camp equipment.

The mortar and pestle is the Indian "master-mixer." The mortar is fashioned from a two-foot section of a thick log and stands upright on the ground. The upper end is hollowed like a bowl by burning, the process requiring about four days if the fire is fanned constantly. The pestle is shaped from a thick stick, long enough to permit the squaw to stand at her work.

For the camp fire the Indian arranges four or more long logs, drawing their ends to a common center like spokes in a wheel. As the logs are consumed, they are pushed forward to feed the fire. On chilly days they provide warm and comfortable resting places.

Over the flames is set or suspended the camp "*sofkee*" pot containing a thin, unsalted gruel of grits, meal, or rice that is kept hot from dawn until bedtime. When the family is around the camp there is no regular mealtime; each member eats whenever he happens to feel hungry. Otherwise the men eat first. For each pot there is usually but one large wooden spoon that is passed about when they eat, and a meal is often a long-drawn-out affair.

The average Indian is industrious and a good family provider. Some camps cultivate small plots of ground producing, because of poor methods, scanty crops of corn, sugar cane, yams, and pumpkins. These are supplemented by wild berries, fruits, and the tender shoots of the cabbage palm.

During the hot, rainy season, vegetables, never plentiful at any time, are doubly scarce. "Gopher," a lean, tough, land turtle, and "garfish," a leathery form of water life, roasted over the fire become the principal foods. Even these are becoming more difficult to obtain with the passing years. This is one reason why camps are moved so frequently.

Whether from economic causes or contacts with civilization, the

dress of the Indians has undergone extensive changes during the past twenty-five years. Earlier in this century the men wore leggings and moccasins of deerskin. They also affected a turban of shawls or large handkerchiefs and likewise wore numerous handkerchiefs around their necks. The women were attired in full, straight skirts that failed by a wide margin to meet a short, long-sleeved upper garment. They wore no covering for their feet or head. Their coiffure consisted of bangs with a Psyche knot. While some of the older women today still wear their hair in this fashion the younger have adopted an intricate pompadour protected by a modern hairnet. These pompadours, sometimes set at a rakish angle, are often so large they appear like wide-brimmed black hats. They still wear the full old-fashioned long skirts but the upper garment is now a wide cape that reaches to the wrists. Many of them own rings and bracelets of hammered silver. The heavy silver necklaces, aptly described as breastplates have given way to strings of colored beads, piled, loop upon loop, until they frequently become a collar reaching from the shoulder to the ears.

The men, like the women, have also made concessions to civilization but, while the women have adopted the policy of more clothes, the male tends toward simplification. Except for the older men who still cling to the one piece tunic, most Indians wear "store" pants and shoes. Their shirts are more colorful than ever but the turban is fast disappearing. Most of them still wear a bright-hued handkerchief about the neck. Neither the men nor the women wear any sort of undergarment.

While the male is still the hunter, he does not confine his labor exclusively to the chase. There is a fair division of work and the woman is not a mere drudge or slave to her lord and master. She spends most of her time about the camp, cooking, sewing, washing, and perhaps making curios. The money the squaw makes is her own and she spends it in shops, when she goes to town, without consulting her husband. The children collect roots of the coontie for flour and help with other light tasks. Any heavy work, including planting and care of crops, is performed by the men.

Camp life is largely communal so far as labor is concerned, but property rights are inviolate. The modern steel traps used mostly for raccoon are private property as is the 50 cents derived from each pelt. Deer hides are worth as much as $2; the horns are sold as souvenirs and the venison used for food. The Seminole does not sell his house which, if not in use, may be occupied by another family. If a new family comes to live in an established camp he may use the common shelter for awhile but, by custom, is expected to build his own hut if his stay is overlong.

The increasing scarcity of food experienced by the Seminoles has forced on them an unbalanced diet and, consequently, many of them, especially the children, suffer from malnutrition and need dental care. Still more serious are the problems of sanitation and hygiene. More frequent contact with white men in late years has brought among the Indians many diseases, hidden enemies which they do not know how to combat. Typhoid and tuberculosis are rare. Hookworm is prevalent. The first case of venereal disease appeared in 1923; by 1930, 25 cases were reported and the disease continues to spread. Of all the maladies reported, malaria occurs most frequently.

The first health survey was made by Dr. O. S. Phillips in 1919 and his report indicated that conditions were good. Subsequent investigations, however, reveal that sanitary conditions are generally bad and that the Indians, if they are to be saved from extinction, need instruction in hygiene. The swamp lands they inhabit are alive with mosquitoes. Their water supply is usually a shallow pit or hole filled with discolored surface water used indiscriminately for bathing, washing clothes, and often accessible to the pigs, chickens, and dogs about the camp. Garbage is thrown just beyond the limits of the camp where, trampled by the animals, it swarms with flies that find their way to the cooking utensils and unprotected food. While these conditions do not prevail at all camps, sanitation is the exception rather than the rule.

The Indian Agency has provided contract doctors in several areas, but it is not usual for an ailing Indian to seek the aid of these doctors immediately. Instead, he is expected first to consult his medicine man. Inasmuch as the medicine man travels about from camp to camp, he is often difficult to find. If the remedies prescribed by the medicine man do not effect a cure, the sick man will leave his swamps to consult white doctors. The cures the latter have brought about are increasing their prestige among the Indians who now call on them more frequently.

The Seminole medicine man is no obstetrician and is never called to attend an expectant mother. When her hour of labor arrives the prospective mother, accompanied by a near relative, retires to a previously prepared tent or shelter, some distance from the camp. Cory Osceola brought his wife to a hospital in 1929 and that was the first year an Indian maternity case was admitted to a Miami hospital.

When the baby is four days old it receives its first string of beads. Should the string break before a year has passed, it is believed that the baby will lose many friends. To avert such bad luck, the beads are often restrung during that period.

As a child grows older he receives the customary training in

obedience. He must learn to obey commands immediately and without comment or argument. Unruly youngsters are switched. In flagrant cases the parent uses a snake's tooth to scratch the stubborn child's arm, sometimes bringing blood. That these Indians have their problems in child training and guidance is evident from the many scarred arms observed in some camps.

The training a child receives is of an intensely practical nature. As a rule Seminole children are unworried by church or school bells. A few girls have been sent to out-of-state reservation schools and one boy attend the Miami Senior High School. Several attempts to establish schools among them failed, largely because the average Indian family does not remain long in one place and because many of them still cling tenaciously to old traditions. "Indian wants to live as he lived in the old days": in these words Sam Jones, influential medicine man voiced the attitude of his people.

This viewpoint has helped also to defeat repeated efforts by several religious denominations to Christianize the Seminoles. The Baptist and Episcopal missionaries are still in the field, aided by a Creek Baptist missionary from Oklahoma, but even after years of teaching, Christian religion is still not established as an institution.

They believe in a Supreme Being, a future existence, and resurrection, but whether these beliefs are vestiges of early Spanish influences or the result of later missionary efforts is difficult to ascertain. Their legends would indicate that their present religion is a rather confused collection of concepts growing out of a fusion of the beliefs of the various peoples who combined to form the tribe and the passive or unintentional adoption of such Christian tenets as appealed to them.

"E-shock-e-toni-isee" (God), according to one version of creation, scattered seeds in a fertile valley and men sprang from the seeds. God had a son, "E-shock-e-tom-issee-e-po-chee," who, at one time, came to live with the Indians in the southern part of Florida and, carried over their land by three braves, sowed coontie seed that his people might never be hungry. Coontie (wild cassava) today is found only in the southern end of the peninsula.

That they have knowledge of the Christian version of creation is evinced in a story told by a white medicine man, a particular friend of the Big Cypress group. When this man told how the Great Spirit took two ribs from the first man and made a woman, a listening Indian gravely interrupted him with the words, "One rib."

Fear, the basis of most primitive religions, is embodied in the Seminole belief and tends to secure conformity to their moral code, neither to lie, nor steal, nor cheat. When a bad Indian dies his soul dies with him and there the matter ends. The soul of the good In-

dian goes to talk with God for four days. While it is gone the family keeps fires lighted at each end of his grave. After talking with God, the spirit, "Sue-loo-path-e," of the dead Indian returns to earth, looks over his home and friends, takes his possessions, and departs. The spirit is free to return at any time but this privilege is not accorded the spirit of bad Indians.

A somewhat different practice is observed when an Indian meets a violent death. Chief Jack Tigertail was shot and killed by a white man early on the morning of March 8, 1922. He was buried by white men who placed beside his body all his possessions, including his rifle. Only a brother was present. The family remained in camp for, in cases of violent death, evil spirits take possession of the body. If near relatives look upon the remains, these evil spirits escape and enter into them. By not looking on the dead kinsman, the evil spirits are compelled to remain in the body and are buried with it. To ward off any stray spirits and bring peace to the tribe, the family keeps a number of fires burning about the camp for four days.

Social control assumes severe forms in marriage regulations. While an Indian may take a wife from another race, tribal law, rigidly enforced by the squaws, prevents an Indian woman from accepting any but an Indian for a husband. The Indian girl who transgresses the moral code faces death. Nigger Dick, who lives at Immokalee, is the son of an Indian mother and a Negro. The squaws killed his mother when he was two years old. Another Indian girl who had a baby by a white man was subjected to heartless cruelty by the squaws when she gave birth to her child. Two white women who were present left the scene for a few moments and on their return discovered that the squaws had killed the newborn baby.

Adultery is likewise punishable by death and marriage vows are therefore rarely broken. Divorces, however, are permitted, but are extremely rare. In case a couple decides to part the procedure is simple. The man leaves and the woman becomes again a part of her mother's family. Any children born of the union belong unconditionally to the wife. This right is vested in her by reason of the Seminole custom of reckoning descent through the mother and is so strongly felt that a man will not touch or fondle his children following a divorce.

Marriage is exogamous, that is, forbidding a man to select a mate within his own group or clan. According to an old tribal custom it should be prefaced by an engagement lasting over a period of four years. During that time the prospective groom must live with the girl's family. If the young man proves amicable and is well liked they may be married by the chief at the Green Corn Dance following the

fourth year of their engagement. As a rule, however, the young couple finds the situation intolerable and elope into the swamps. On their return they go before the chief who performs an informal ceremony. The formal marriage must take place later at the Green Corn Dance.

The marriage ceremony is short, its performance requiring but a few brief words. Tony Tommy and Edna John Osceola, a descendant of Chief Osceola, were married on June 16, 1926, with John Osceola, uncle of the bride, officiating. Bidding the couple to clasp their right hands together, he instructed them to "Be good, love each other and live together." The evening was spent in feasting and dancing. The next morning the young couple left camp for an indefinite stay in the Everglades, Indian equivalent to a honeymoon, "Hump-a-lag-go."

Not long afterward, Edna Tommy died in camp on the Miami River and was buried the same day in Woodlawn Park Cemetery, for custom decrees that a person dying during the day must be buried before the sun sets. If death occurs during the night interment must take place before sunrise.

The morning she died the waters of the Miami River were consecrated and the women of the village bathed in the sacred water. Cooking utensils were cleaned and scoured and nothing was cooked in them that day.

During the day, bread, canned foods, water, her clothing and personal trinkets were placed in her coffin at the funeral home. At the ceremony Tony Tommy, with a blue handkerchief tied over his head, stood at the head of the grave and handed down his wife's blankets and cooking utensils. The grave, in accordance with Seminole instructions, was so prepared that the remains might face the rising sun.

Since the Seminoles began burying their dead in the cemeteries provided for their use at Dania and Immokalee reservations, some of the ceremonies have been dropped. Until a few years ago, the Indians took their dead to the Everglades. They placed two heavy logs side by side and lined the space with palmetto fronds on which they laid the corpse wrapped in a blanket and bound with ropes or sawgrass. When the possessions were arranged beside the body they laid a "hog pen" of logs over it for protection from buzzards and animals. They made medicine and departed to return again after an interval of four months when they cleaned around the "pen," made more medicine and left, never to visit the spot again.

No women attended these funeral ceremonies. If the deceased were under five years of age the women took complete charge and the

men were not permitted to assist. No medicine was made at a child's funeral but the women returned to clean around the "pen" as did the men.

Many ceremonies of various natures are performed at the Green Corn Dance, held deep in the Everglades during the month of June. This dance is the annual "get-together" for the Seminoles and is the only festival in which all groups participate. The locations are determined each year and three dances are arranged on dates that permit any Indian or group of Indians to attend all three, but the privilege is little used.

While a few white men have witnessed some of these dances, it is doubtful if they have gained an accurate or complete knowledge of their meaning. In the early part of the century young Indians were initiated as warriors in one of the ceremonies known as the "In-sha-pit." The young buck's legs were cut with switches until the blood flowed and he was acknowledged as a warrior if he betrayed no sign of pain.

At this festival the Indians also pass judgment on those who transgress tribal laws. Some years ago a prominent Seminole killed a squaw in a drunken brawl. Following the crime he was placed in custody of a fellow tribesman since the Seminoles have no jails or officers of the law. Later, he accompanied his custodian to the Green Corn Dance knowing full well that a death penalty awaited him. The night before the trial his stoicism deserted him and, apart from his fellows, he lay through the long hours of darkness, groaning and rolling on the ground.

Meanwhile the Indian agent, old, partly deaf, and half blind, was hurrying along the arduous trail to the camp. He appeared before the solemn council and pleaded for the life of the murderer. The man awaiting judgment had been of great help to their tribe in the past and if spared, would be a credit to them in the future. The agent won a suspended sentence for the prisoner who was, nevertheless, placed under probation for life. If, thereafter, he was found in any disturbance, even though it be started by others, he was subject to immediate execution. He lives today still under the shadow of this perpetual sentence. He is an influential man in his tribe, friendly with white men, and leads an exemplary life.

At the Green Corn Dance, which is likewise a feast for sorrowing, rejoicing, and purifying, men who are guilty of minor offenses are reinstated. The offenders are confined in a closed tent where a large stone rests on a roaring fire. The "Black Drink," an herb concoction prepared by the chief medicine man, is poured over the hot

stone and the entrance to the tent is sealed. Later, the inmates are released and permitted to join the festivities.

The Indians, during these ceremonies, permit no white men to approach, to take pictures of, or to speak with the medicine man or members of his council. The medicine man sits near the sacred fire and from time to time takes herbs from a leather pouch dropping them in a kettle to make the potion which the braves drink and also use to lave their faces and feet.

It is said that the "Black Drink" is brewed from a mixture of star grass, slippery elm and palmetto leaves, and used by head men in preparation for important conclaves. The beverage is supposed to cleanse the system and bring wisdom and clearness to the mind.

At sundown the men and women gather about the fire and begin to chant, dancing in single file around the blaze. The women used to wear pebble-filled gourds tied just below their knees for this dance but they have now adopted tin cans filled with beans or pebbles. Their songs are a rhythmic monotone. They seem to have forgotten both their war songs and dances.

Minnie Moore Willson, a writer on Indian life, mentions a ritual, similar to the national festival of the Aztecs, during which the old fires are permitted to die. When the last spark is burnt out a new fire, the Sacred Fire, is kindled by means of a flint and the fire is presented from one tribe to another as a token of friendship.

According to an old Seminole legend there was once a time, long ago, when only one tribe knew the secret of fire. This tribe guarded its knowledge closely. Even at the Green Corn Dance, braves from neighboring tribes were not allowed to approach the flames.

One year a large rabbit came to the Green Corn Dance and asked to join the dance. The elders of the tribe were suspicious and would have refused his request but the younger Indians, intrigud by the rabbit's charm and persuasiveness, over-ruled their objections. So the rabbit joined the celebrations and he danced and sang so well he soon became the leader.

As he circled the fire he extended first one paw and then the other toward the flames. The older men muttered at his temerity but the young men laughed at his capers. Suddenly the rabbit seized a brand from the blaze. Before the startled Indians realized his intentions, he broke through the crowd and raced into the forest. He ran with such speed that pursuit was useless.

The wise men held a council and it was decided that they must bring rains to extinguish the fire stolen by the rabbit. The medicine man went to the spring guarded by the snake. For four mornings he made medicine, charming the snake and troubling the waters of

the spring. Then the rain came. It overtook and drenched the rabbit deep in the forest and the fire he carried was put out.

The rabbit appeared again at the Green Corn Dance held the following year. Again he persuaded the Indians to let him join the dance. After hours of fun-making and laughter he again seized a burning brand from the fire and escaped into the forest. Once more the medicine man made magic. The rain overtook the rabbit and quenched the stolen fire.

When the Indians gathered for the Green Corn Dance on the third year the rabbit renewed his efforts to secure the fire but though he succeeded in stealing it the medicine man brought the rain for the third time and the rabbit's work went for naught.

The rabbit, however, was persistent. He came to the dance the fourth year and once more persuaded the tribe to let him join the dance. As before, the cunning rabbit made off with a stick from the fire. For the fourth time, the medicine man caused the rains to come. The rabbit, by this time, had become wiser. He knew the rain would destroy the fire he had stolen. When the first drops began to fall he ran to a coral reef and held the fire under a sheltering rock. When the rains ended he continued his journey and carried the fire back to his tribe.

Such are the stories told and retold, year by year, at the "Green Corn Dance." Ancient rites and traditions, things that make a people into a community, are fostered at this ceremony. Seminole laws are embraced in their simple moral codes, and the group assembling at the "Green Corn places" is the judicial and executive body.

Theoretically, the Seminoles are subject to all state and Federal laws but the application is general and enforced only if the crime implicates a person outside the tribe. In a recent murder case involving two Indians, the local court conducted a perfunctory hearing and turned the offender back to the tribe for judgment.

While the Indians appear thoroughly capable of handling internal affairs, they are not a unified people and stand in need of a recognized leader. The Big Cypress group maintains an independent attitude and apparently resents the growing intimacy between the East Coast Indians and the whites. On one occasion, they openly denounced an overture which an eastern group made to the Federal Government.

Tony Tommy, educated with white children at Fort Lauderdale, addressed the following communication, dated December 10, 1926, to President Coolidge:

> "It is the sincere and earnest wish of the 300 members of the Seminole Indian nation in the State of Florida to end the truce

made for them by Chief Osceola with the United States Government, in the year 1817, and to become citizens of the United States of America by severing allegiance to the job and to take such legal and necessary steps as will remove all legal restrictions which have heretofore prevented them from enjoying all the rights and privileges accorded other nations and peoples.

"In councils with the people of my various tribes, I as ordained chief of the Seminole Indian people in all Florida, have been authorized to take such steps as I deem advisable to bring about a more amicable relationship with the United States Government.

"I, therefore, beseech you as President of the United States of America to listen to my appeal and give me advice and council regarding what steps are necessary to bring about the desired end."

Nuck-Suc-Ha-Chee, a resident of the lower Everglades branded Tony Tommy a fake and labelled his peace gesture a publicity stunt. Indignant, he dispatched Josie Billy to Fort Myers to say that when Federal cooperation was wanted the Indian council would take formal action and make announcements through the proper channel, the medicine men.

This resentment against intrusion in their affairs is very much alive today. A group of big Cypress Indians refused invitations to the dedication of a new school building completed on the Brighton Reservation in November, 1938, though a majority of the Indians on this reservation favored the school for their children and cooperated to the extent of aiding in its construction.

The first school for Indians on the East Coast was built at Dania and opened in January 1927. It was closed much of the time for lack of attendance. Another school built at Miami remains unused for the same reason.

Since the Florida Seminole Agency, later moved to Dania, was established east of Fort Myers in 1892 for the "support, civilization, and instruction of the Seminole Indians in Florida," but little progress has been made. At their camps and villages, the Indian commercializes his handiwork, his sports, his traditions, and even his very family. Yet, though his premises are open and unguarded, his attitude of philosophical and stoical indifference is as unimpressionable as the silence of the never-ending swamps that stretch away to the gray horizon.

HISTORY OF MIAMI AND DADE COUNTY

THE first white settlement in Dade County was on the site of what is now the city of Miami. It was the Jesuit Mission of Tequesta, established by Pedro Menendez de Aviles in 1567, and consisted of a block-house that sheltered about 30 soldiers and Brother Villareal, a Jesuit lay brother, who was delegated to instruct the Indians in the Christian faith.

These Indians were of the Calusa nation. They were cruel, shrewd, and rapacious. They were known to offer human sacrifices. They murdered most of the priests, explorers and adventurers who came among them or who were so unfortunate as to be shipwrecked on their coast. Early writers never definitely established a reason for their bloodthirsty attitude. According to Fontanedo they often killed their white captives, not out of fear or anger, but out of sheer annoyance. The savages might ask the whites to dance or sing and the captives could not obey because they did not understand the Indians who thereupon put them to death.

Such were the Tequestas and other tribes of south Florida. The site of the Jesuit Mission at the mouth of the Miami River has not been definitely located. Its brief history is but a line or two in the annals of the early Jesuit Fathers. The Tequesta mission was abandoned and it was not until 1743 that another attempt was made to Christianize the natives in this area.

Father F. X. Alegre in his *History of the Company of Jesus,* writing of the inhabitants of the keys, says that they had "inherited a reverent regard for the early Jesuit Fathers from their Calusa and Tequesta ancestors." At any rate the Jesuits established a second mission, San Ignacio, somewhere in the vicinity of Coconut Grove. The Fathers mention their meeting with the Miamias, and this is the first instance in which the name is associated with a people.

Two priests, Fathers Alana and Monaca, worked with the soldiers to build a shelter of logs, mortar, and coral stone. Father Alana then went to Cuba to ask the governor, Gomez y Horcasitas, for additional soldiers. The request was not granted and sometime later this second mission was deserted.

Spain and England, in 1748, concluded a treaty designed to keep peace between their respective colonies in the New World but in 1759 Spain joined France in the French and Indian War. Three

years later, Havana and Cuba fell to English arms. Spain regarded Cuba with more interest than Florida and therefore, when peace was made, succeeded in trading the English out of their possession, offering them the Territory of Florida. Thus, under the Treaty of Paris, 1763, Florida passed to the English having been under Spanish rule for nearly two centuries.

In 1774 Governor Patrick Tonyn was in charge of the government of East Florida, King George III having divided his prize into an East and West Florida in 1763, the year in which the last of the Calusas were transported from Dade County to Cuba. Tonyn's name is of interest because it is said to be affixed to the first land grant made in this area.

After the Revolutionary War, Florida remained an English possession but was shortly afterward traded back to Spain again, England receiving in return the Bahamas. During the English regime many loyal subjects of the King, and others, had been led to settle in Florida. It is probable that most of them might have retained their holdings but to do so they would have to swear allegiance to the Spanish King. The English Crown generously offered to reimburse subjects who held Florida lands and preferred to lose them rather than become subjects of Spain.

One of these was John Augustus Ernest who described his property as follows:

> "Sheweth that your Memoralist now is, and has been
> "a Resident in London upwards of twenty years; and
> "at the late cession of East Florida to Spain was
> "in possession of twenty thousand Acres of Land, in
> "Pine, Marsh & Savannahs, situated on Gulph Sandwich,
> "bound by Rock-Bridge River North; by a fresh Water
> "River, South,—by Biscayne Sound East;—& by vacant
> "Land West; distant from St. Augustine in said pro-
> "vince of East Florida about two hundred and Ninety
> "Miles, South:
> "That the said twenty thousand Acres of Land were
> "given and granted to the Memoralist, and to his
> "Heirs for ever, by the King & Council, and by Patent
> "under the hand and Seal of Governor Tonyn, dated East
> "Florida, 27th. December 1774. . . . . ."

Ernest never saw his land in Dade County. During the period of English occupation, however, there was another, one Frankie Lewis, who evidently had no great concern about his political or

governmental ties. In 1796 Lewis obtained from the Spanish Crown, a grant of 640 acres located "south of the New River, near Cape Florida."

This marked the beginning of a mild real estate boom in what is now Dade County. In 1805 his Spanish Majesty granted 175 acres of land on Key Biscayne to Mary Ann Davis and another of 640 acres, "south of the Miami River, near Cape Florida" to Polly Lewis. John Eagan likewise secured 640 acres, "south of the Miami River, near Cape Florida," and then, when this location became overworked, the Spanish King varied his custom. The next grant was made to James Eagan, son of John Eagan, settled on his 640 acre section, "north of the Miami River, near Cape Florida."

Rebecca Eagan obtained 640 acres, again "south of the Miami River, near Cape Florida," and the Lewises stepped in again as Jonathan Lewis took up another 640 acres in what later became known as the "Punch Bowl District," an area in the vicinity of Coconut Grove. More specifically located was the grant of Richard Tice who obtained a section of 640 acres near Cape Florida and the Miami River and "opposite Key Biscayne."

A fourth name apparently enters this early history as a James Hagan and Mrs. Hagan are each credited with 640-acre grants along the Bay, one on each side of the Miami River. These names evidently clouded title to this land for 80 years for in 1892, by virtue of a court order, the name "Hagan" on these patents was changed to read "Egan."

Two larger grants appear in this period as Joseph Delespine obtained 92,160 acres and Archibald Clark was donated 80,000 acres. Both these grants were located "near Cape Florida," and were made in the year 1813. Succession of title was broken and later records do not reveal the disposition of these lands which afterward became public domain. Another large grant of 12,000 acres, made to Eusebio Maria Gomez, was "on the river and island known by the name of Jupiter and Saint Lucia."

Along the Gulf of Mexico, the strip of land called West Florida became the refuge of pirates, outlaws, runaway slaves, and Indians. Marauding bands hampered the development of adjoining territory and lawless men preyed on shipping from Gulf ports. These conditions and the desire of the United States government for a clear path to the sea for the Mississippi River Valley agricultural products led to a bold move.

President Madison, in 1810, ordered Governor Claiborne of New Orleans to take possession of West Florida. By a secret act early in 1811 Congress authorized the President to occupy East Florida. Great

Britain protested this bare-faced occupation of Spanish territory so violently that Madison withdrew the troops in 1813.

Border trouble persisted, however, and Spain in trouble with its revolting South American Territories, was in no position to keep order in Florida. Monroe, in 1817, took the opportunity to send Jackson on an "Indian hunt" in Spanish territory. General Jackson swept across Florida in five months and in 1818 returned to the United States, leaving Florida a conquered province. Spain decided to abandon the territory, which by treaty became a possession of the United States on February 22, 1819.

Eleven years later, in 1830, the holdings of the Lewis and Eagan families became the property of R. R. Fitzpatrick, of Columbia, S. C., who later became collector of customs at Key West.

Fitzpatrick was a man of industry and resource. Bringing a large number of slaves, he began an ambitious agricultural program, clearing the jungle growth along the shore for three miles south of the Miami River and one mile north of it. On this rich hammock land he began a plantation of lime trees and cotton.

The increasing intrusion of white men into territory held by the Indians brought on the same difficulties in Florida as it did in other parts of the country. In 1835, the beginning of the Seminole War in north Florida, the Indians in the southern end of the peninsula became unruly and began desultory raiding. Fitzpatrick grew alarmed and moved to Key West. During the same year Major Francis L. Dade, with all but two of his men, was massacred by the Indians in Sumter County.

The United States initiated a determined campaign to put down the Indians by removing them from the state to reservations in the West. The Indians, in turn, clung stubbornly to the land which was swiftly becoming as foreign to their wants and needs as any. They were driven from their homes and forced to seek refuge in the swamps and morasses. Driven continually southward, they nevertheless seemed to have a never ceasing source of supplies that enabled them to resist successfully the Federal troops.

It was suspected that these supplies were coming from sympathizers in Cuba. The coastal regions were lined with forts and military roads and the bays and inlets swarmed with patrol boats and still the wily Seminole chieftains outwitted their would-be captors.

During 1836, the year Dade County was created by an act of the Territorial Legislative Council, the Seminole committed a crime that stands out in the history of the area chiefly because it is marked by an historic landmark and therefore easy to point out. On the afternoon of July 23, the Indians began an attack on the Cape Florida

Lighthouse which, at the time, housed John W. B. Thompson, keeper, and his Negro servant.

The Indians burned the lighthouse. Thompson and the Negro were wounded, the latter so seriously that he died. Thompson cut away the stairs and found safety on a narrow platform around the light, high above the ground, where he nearly roasted before the flames subsided. He was rescued the next day by members of the crew of the United States schooner *Motto.*

Marie Coppick, in an undated clipping from the Miami *Daily News,* drawing for material on a diary said to be owned by Mrs. Harry B. Boyer, whose husband is connected with the United States Meteorological Station at Key West, gives a slightly different account of the incident. Mrs. Boyer is the daughter of Mrs. Cortland Williams, whose maiden name was Druscilla Duke. In 1831 Mrs. Williams, then a child, came with her parents and younger brother to live on the banks of the Miami River. They were warned of an uprising by a friendly Indian and, with several of their neighbors, sought safety in the lighthouse, thinking the Indians would not be bold enough to attack government property. A boat came and several of the refugees embarked on it for Key West but the Dukes elected to remain.

"There were a number of others who preferred to take their chances against the Indians in the lighthouse to the hazards of a sailboat. Among these were my father and mother. We remained at Cape Florida Light."

So reads the diary. After describing the burning of the lighthouse Mrs. Williams tells of their return home. "We were taken to Key West where we remained for a few days and when all was quiet on the Miami River we returned to our home. We found that the Indians had not touched anything belonging to us. Our watch dog was in the front of the house when we arrived and greeted us with his friendly bark.

"Afterwards some old Indian told my father that the reason our home was spared was because we had always been kind to Chief Alabama and his family."

The great problem that confronted the United States during the Seminole conflict was their unfamiliarity with the territory which the Indians knew so well. In addition the soldiers were unused to the climate and encountered many difficulties in establishing suitable bases and arranging for transportation of supplies.

The troops began scouting the Everglades to locate and destroy Indian camps, depots, and supply trails. It was in this connection that Fort Dallas was first established as a naval post in 1834 when

Lieut. L. M. Powell, U.S.N. landed at the mouth of the Miami River and built a stockade. For two years the patrol of Biscayne Bay and the scouting of adjacent territory were maintained. The United States Army then took over the fort.

Some thought the Indians had Spanish allies in Cuba. At any rate they were more alert than the soldiers anticipated. The Seminoles avoided the bay and planted water lettuce and other water weeds in the Miami River to give it an unusual appearance. After several months Fort Dallas was virtually abandoned. Fort Bankhead (later Fort Russell) was continued as a naval base and the Bay of Biscayne guarded from blockade runners. Meanwhile, the south fork of the Miami River was alive with contraband boats moving from Cape Sable and Taylor River northward to the waterways near Fort Pierce.

The "Davis Military Map," a compilation of information gathered by officers who had served in the Seminole War up to that time, 1856, shows that during the period from 1834 the Everglades were thoroughly explored and many forts, subsidiary to Fort Dallas, were erected at what were considered strategic points.

The sites of many of these forts have been lost. In 1848, Fort Dallas was a stockade of tree trunks and heavy timbers, its wooden buildings thatched with palmettos which, in turn, were thickly plastered with mud as a protection against fire-arrows. The permanent garrison maintained at Fort Russell (Bankhead) on Biscayne Key came over from time to time, did some work on the fort, but there is no record of decisive battles with the Indians.

It was not until Captain Bennett C. Hill, with a company of artillery and a few engineers arrived in 1849 that a permanent fort was built. William English, who had finally acquired the Eagan-Lewis grants, had begun the construction of the stone structures that are generally spoken of as Fort Dallas. Captain Hill's men completed the buildings. His constructions were to "make the fort substantial and open a road to Lake Okeechobee and maintain it." His scouts were also to "discover where and how the contraband came in so voluminously."

At this time, records show that Hill found a two-story building 42 x 29 feet, which we know was the officers' headquarters, later the residence of Mrs. Julia D. Tuttle, and the first courthouse in Dade County. There was also a long one-story building, 95 x 15 feet, which was given a second story of planks, and a "piazza in front on both floors for coolness." This fort was abandoned on June 10, 1858, after the soldiers found and cut off the Seminoles' last avenue for receiving supplies.

This supply route, known today as Chi's Cut, was an artificial

waterway constructed by a subchief named Chachi who seemed to be a sort of quartermaster general. Originally it was a barely perceptible indentation on the shore line, a natural outlet draining the low prairies southeast of Homestead and emptying into Biscayne Bay. This obscure waterway ending in coastal mud flats was navigable for shallow Indian boats during periods of high waters.

Chachi deepened this sluggish stream until it would accommodate his boats and transplanted water plants to conceal it from the soldiers. It served until the soldiers captured a Negro who had been an Indian slave. Making him drunk, they learned from him the secret of Chi's Cut and also the blind entrance to Taylor River which connected with practically all known canoe lanes, the Miami, Harney, Shark, and New Rivers and their tributaries. With this knowledge the troops were soon able to bottle the Seminole in the Everglades. Without military supplies they could not carry on war. They gradually accepted the situation and while they were more or less troublesome for another generation, no serious incidents occurred.

While the Indians were developing their ingenious system of inland waterways, the soldiers were likewise busy constructing a road down the east coast to facilitate the transportation of heavy ordinance. This first rough roadway known as the Capron Trail was used for many years by settlers as they carried civilization southward and today is followed approximately by the railroad and highway that run down the eastern edge of the peninsula.

The route of the Capron Trail where it is not destroyed or hidden by modern trails, is covered by trees and vines that have grown over it in the past three quarters of a century. Only a part of the actual route of this old military trail has been definitely established.

During the war with the Seminole the army erected a headquarters at Fort Pierce. Eight miles to the north, opposite the "Old Inlet" of Indian River was the nearest satisfactory point for ships to land supplies. Here the soldiers built a pier protected by a heavy stockade. This trail, between the landing shown on the map as Ft. Capron, and Ft. Pierce, became known as the Capron Trail. As the war progressed the troops pursued the Indians southward. Fort Jupiter was built in January 1842 and Worth's Stockade soon afterward. The road followed the movement of supplies to Fort Lauderdale and to Fort Dallas.

In Miami the Capron Trail left the fort at a point now covered by the northwest corner of the Dallas Park Hotel, progressed in a northwesterly direction to Miami Avenue to the old City Cemetery. Where this avenue crosses the tracks of the Florida East Coast Railway, a narrow street branches off diagonally to the right. This little street,

unnamed on city maps, marks the course of the trail as it bent eastward. At Northeast Second Avenue it again turned north and crossed Little River by means of a ford about 20 feet east of the present bridge.

Parts of the Trail are still visible on the "Old Back Road" to Arch Creek. The Old Dixie Highway covers the Trail until it joins the new Federal Highway. The route from that point northward is uncertain. It is believed to have passed through Dania, known as "Five Mile Hammock," and then turned eastward and northward to New River to Colee's Hammock where there was once a ferry, site of the Colee Massacre.

It touched Indian Hammock, continued along the broken land between the coastal plains and the Everglades, and continued into Palm Beach County where several miles of this trail, now called the "Military Road," are still in existence.

During the early part of the war, before this military road was completed, the Indians, far to the southward, wiped out a pioneer settlement, killing a man whose memory is still perpetuated in the name of Perrine, a little town southwest of Miami. Dr. Henry Perrine was a botanist who had served the Federal government as consul at Campeachy, Mexico, for 12 years. In recognition of the doctor's services and to permit him to engage in experiments in tropical agriculture, Congress, on July 2, 1838, granted Dr. Perrine, a township of land, on the mainland, along Biscayne Bay in unsurveyed territory.

Dr. Perrine, while waiting for the Indians to subside, brought his family to live in a little settlement on Indian Key where there was some promise of security. About a mile to the north, on Tea Table Key, were a naval station and a small detachment of soldiers. The doctor's home was a substantial three-story structure, part of it extending over the water. From it projected a walled-in passage which extended under the house to form a bathing pool reached by a trap door from a dressing room above.

When drunken Indians attacked the settlement early on the morning of August 7, 1840, Dr. Perrine roused his family and urged them through the trap door into the bathing pool. The Indians broke into the house and set fire to it after killing the doctor. The family, suffering from burns and smoke, lay concealed beneath the wharf until most of the Indians had departed when they found a small boat and were rescued by a passing vessel.

While the war was in progress the politicians were busy at statecraft. New counties were formed with startling rapidity. The territorial form of government did not meet the approval of men

who jealously viewed the increasing power and wealth of adjoining states. Florida had no voice or power in Washington.

Men of the newly formed Dade County were as dissatisfied as the rest. December 3, 1838, found Richard Fitzpatrick, representative from Dade, at the constitutional convention called at St. Joseph, seat of Calhoun County.

During these years things went from bad to worse in Dade County. Agriculture became impossible and family after family drifted to safer localities. In 1850 the English plantations were deserted. After 1858, when the soldiers withdrew, the old buildings became the headquarters for blackguards and outlaws and so remained for nearly twenty years.

One of the interesting court records dating from the period of Florida's territorial existence, is the copy of the first marriage license and certificate issued in Dade County and which reads as follows:

"Marriage License Temple Pent Junior
Clerk's Office Indian Key, July 11, 1840
Territory of Florida
Dade County

To any ordained minister of the Gospel or Justice of the peace within said County, Greeting:

Temple Pent Junior having applied for License to be united in marriage to Eliza Bulward of this county.

You are hereby authorized to join together the said parties in holy wedlock and for so doing this will be your sufficient warrant.

Witness my hand and the seal of the county Court of Dade County this Fourth Day of July, A.D. 1840.
(Seal)

W. CATHCART MALONEY, *Clk. D.C.*

These are to certify to all whom it may concern that Temple Pent Junior of the County of Dade, South Florida, Bachelor and Eliza Bulward within the said County, widow was after the exhibition of the certificate of regular license married at the house of William Pent, Key Vaccas, on the fifth day of July one thousand eight hundred and forty by me.

ROBERT DYCE, *Minister*

This marriage was solemnized in the presence of
GEORGE STAFFORD
TEMPLE PENT SENR."

Allen Morris, in an article appearing in the Miami *Herald* of May 29, 1938, describes a letter penned by this same W. C. Maloney, Clerk of Dade County, to his excellency the governor. Maloney was disgusted. Condensed, the story in the letter is as follows:

After the destruction of Indian Key (1840) Maloney deserted the County Clerk's office. He ordered elections in 1841 and again in 1842 to fill his office but no candidate appeared. Maloney continued, therefore, to "act" as clerk to accommodate his neighbors.

After the key was destroyed he had nothing left but the county seal. He had to dig in his own pockets for the price of a record book and such papers as were necessary for his office.

In 1843 a general election was held on the sixth day of November. Maloney could not canvass the vote and get the returns to the legislative council within the time prescribed by law. Because they could not be regarded as legal returns he sent them to the governor.

Said Maloney: the county seat has been wiped out; it is no longer safe to reside in the county; it was impossible to canvass the vote within the specified time; he didn't want the job, and, apparently, neither did anyone else.

The boundaries of Dade County were changed with surprising regularity after its creation in 1836. In 1870 it extended from above Jupiter, 150 miles southward, to a point north of Key Largo and its western boundary lay near the center of the peninsula. In this vast area, almost as large as the State of Massachusetts, less than 100 people made their homes.

Into this desolate country, in 1870, came William B. Brickell, who settled on a point of land on the south bank of the Miami River where it empties into the bay. Here he established an Indian trading post and became mildly interested in public affairs when he was appointed by the governor to act as County Commissioner along with Andrew Barr, John A. Addison, and a Mr. Charltes, all of Lake Worth.

Other county officials at the time were: T. W. Faulkner, county judge; Dr. R. B. Potter, county clerk; A. C. Richards, tax assessor and collector; and William Metaur, sheriff.

About the time of Brickell's arrival a settlement was under way at Coconut Grove. A store was built there in 1870 and a post office established in 1873. Brickell seems to have enjoyed a hermit's solitude as other thriving settlements sprang up at Buena Vista and Lemon City. He began buying land south of the river from Harriet English who had inherited the holdings of her brother, Richard Fitzpatrick.

Property on the north side of the river likewise began to change hands. It is said that William F. English who owned much of this land, was a nephew of Richard R. Fitzpatrick. In 1851, they purchased the S. S. *Commodore Stockton* and began a boat line to California. They lost their vessel after it was seized on some technicality when a storm forced it into a Mexican port. Harriet English acquired the land which was sold to Dr. J. V. Harris who experimented, unsuccessfully, with tropical plants.

The Biscayne Bay Company, organized at the time, secured title

to the property through George M. Thew. Frank G. Ford is later listed as a title holder and, still later, transfers were made to J. C. Bailey, W. S. Wheeles, Joseph H. Day, and George M. Thew. Mrs. Julia Tuttle began buying the interests of these men and finally secured all but 20 acres which Day reserved.

In 1891 Mrs. Tuttle came to reside upon her property and, with the Brickells on the south bank, the stage was now set for the future Miami and one of the craziest and most spectacular real estate booms in all history. Mrs. Tuttle was no stranger to the area. Born in Cleveland, Ohio, she was the daughter of Ephraim T. Sturtevant who came to Dade County about 1871 and settled on the south bank of the Miami River. He later took up a homestead along the bay about eight miles to the north. Julia Sturtevant was married to Frederick Leonard Tuttle in Cleveland on January 22, 1867. She came to visit her father in Dade County in 1880 and made a second visit two years later. Her father died in Cleveland in 1886, but Mrs. Tuttle returned to Florida again in 1890. Her first purchase consisted of 640 acres covering a square mile at the juncture of the river and the bay. She eventually acquired much more land but it was this first tract that now bears most of Miami's large hotels, stores, and office buildings.

Mrs. Tuttle, according to one report, met James E. Ingraham at a dinner party in Cleveland sometime prior to 1893. Ingraham was then an associate of Henry Plant who was rapidly building up an empire of railroads, hotels, and lands. Mrs. Tuttle immediately thereafter opened her campaign for extension of Flagler's line to Miami, offering half her holdings to Flagler as an inducement to build.

Flagler and Henry Plant, west coast railroad man, had already made an Everglades survey in 1892. A wide variety of crops were being produced in great abundance on some of the lands drained near Lake Okeechobee under the Disston contract. Two thousand acres were in sugarcane, more than 5,000 in rice, and a still larger area was devoted to general truck crops. Plans for draining the vast swamps south of the lake were taking definite shape. The Hon. Frederick S. Morse, later agent for the Model Land Company, a subsidiary of the Flagler System, was, even then, a Miami resident.

Here and there settlers were beginning to occupy choice hammock lands. The population of the county increased from 85 in 1870 to 861 in 1890. These pioneers won their lands from the jungle by hard manual labor, their main implement being the vicious but efficient machete. In those days the back country teemed with game and a man's most frequent visitor was an Indian or an unwelcome predatory animal.

Lumber for building in the Miami area was obtained chiefly from the driftwood that piled up on the beaches. A pioneer's house might not have much of a foundation and it rarely had a chimney or fireplace. In winter when a north wind made things unpleasant, a fire was built out of doors, around which the family huddled for comfort.

Food was plentiful. Sea foods could be had in unlimited quantity with but little effort. Venison and other game were plentiful. Epicurean as this fare was, it grew monotonous and, at times, salt pork, potatoes, cheese and flour became luxuries.

The pioneer's isolation was nearly complete. He traveled by boat or not at all. If he became ill, he was nursed by family or friends or boarded a boat to Key West, an important port since the days of the Mexican War. Early settlers shipped live green turtles by boat to the North and nearly every family had a mill for the manufacture of starch from coontie, a wild tuber that thrived in the area.

Such was Dade County when during the winter of 1894-95 there came the "great freeze," that ruined citrus groves in the northern part of the State. Thousands of grove owners were broke and many thought it spelled the end of the industry.

The course of succeeding events is clear enough but they have been retold so often and with so many variations that the tale takes on an almost romantic touch. Ingraham is pictured bearing a spray of orange blossoms from Mrs. Tuttle to Flagler, as proof that Miami was immune from frost and the logical center of the State's citrus industry. She won Flagler who, with a staff of counsellors, immediately came to interview her.

With his usual astuteness Flagler persuaded Mrs. Tuttle to turn over to him all her waterfront holdings comprising in all, 100 acres and then obtained half of the remaining 540 acres left in that important section of land. Brickell likewise donated certain of his holdings on the south side of the river. In return Flagler agreed to extend the railroad from Palm Beach, to install a waterworks system, and to make certain other civic improvements.

Surveyors came to Miami and later, in the railroad offices in St. Augustine, A. L. Knowlton laid out the original townsite including the narrow downtown streets that are now congested with the traffic of a modern city. Men seeking employment drifted in from all sections of the country, living in tents and hastily constructed shacks until the work began.

The Tatum brothers acquired a tract of land on the south side of the river opposite the point where Flagler Street ended and laid out Miami's first subdivision in 1895, calling it Riverside.

The census of 1895 gave Dade County a population of 3,322 most of which was in the northern part. Many of Miami's early pioneers did not arrive in the city until 1896 when the railroad became a certainty. The road was completed on April 15, and commercial service opened a week later. The first train consisted of a wood-burning locomotive, a mail coach, baggage car, "first and second class day coaches" and a chair car. There was no station, only a platform, near where the News Tower now stands, with a shack for a telegraph office at one end.

There were already several stores established in the area between the railroad and the ferry which gave access to the post office in Brickells' store. The Sewells, John and Everest, arrived March 3, and opened a shoe store in the old Miami Hotel Building on S. Miami Avenue near the river. The hotel was a rough building erected to house the men who were to work on the Royal Palm Hotel. The next day J. E. Lummus opened a general store and shortly afterward Frank Budge began a hardware business and Thomas Townley started a drug store.

Miami Avenue was the first thoroughfare to be cut in accordance with Knowlton's plan. Flagler Street was next and then Southwest First and Second Streets followed by Southwest First and Second Avenues running from Flagler Street to the river.

By May, 1,000 people were settled in shacks and tents built on land that had lain waste since the days of energetic Richard Fitzpatrick sixty years before. More people drifted in and stores and rough buildings were hastily constructed until, at the end of the year, 50 separate business establishments were in operation. One of these enterprises was a newspaper, the *Metropolis*, which now known as the Miami *Daily News*, is still published.

By midsummer of 1916 the population had increased to 1,500 some say to 3,000, too large a community to be without some form of government; but it was not until July that leaders in the movement to create a city were able to round up the required number of men who had the legal right to vote. On the 28th, 343 registered voters met and elected Joseph A. McDonald, one of Flagler's lieutenants, chairman. The name of the city was adopted, the boundary lines established, and an official seal approved. John B. Reilly was elected mayor and Joseph A. McDonald, Walter S. Graham, William M. Brown, Frederick J. Morse, Edward L. Brady, Daniel Cosgrove, and Frank T. Budge were elected as aldermen. The city name narrowly escaped being Dallas, Flagler, or Dade as there were vigorously proposed at the meeting but the electors deferred to the old timers who insisted on the Indian name, Miami.

Sometime in the distant past this bit of territory was definitely marked as an Indian camping ground. The late John Sewell, in his *Memoirs and History of Miami, Florida,* relates that a large Indian mound was removed to make room for Flagler's Royal Palm Hotel. This mound, according to Sewell, was approximately 80 or 90 feet high, and its base 100 x 75 feet. Under the trees growing on its summit he found several graves and gathered the bones into barrels which he stored in a safe place. Almost at ground level he found 50 or 60 skulls and a great number of large bones. He threw everything into barrels and later buried the lot on the outskirts of town. A residence now marks this grave whose site Sewell never revealed.

While work on the hotel proceeded other civic movements were afoot. There was no need now for the mail carrier, Ned Pont, of Coconut Grove to make the arduous journey to Lake Worth each week. The town now had its own post office, moved, by petition, to the north banks so the people would not have to ferry across to Brickell's store for their mail. The *Metropolis* began a campaign for better streets, especially to the wharf on Biscayne Bay where the then existing footpath "played havoc with patent leather shoes and the bottoms of one's Sunday pants." Flagler Street was graded to the bay and Second Avenue from Flagler to Southeast Second Street.

The closing days of the year were marked by a disastrous fire which started Christmas morning in E. L. Brady's general store. There was no fire-fighting apparatus. The blaze gained headway, ignited the frame structure on the opposite side of the street and destroyed all the buildings in the block.

Flagler cut a channel across the bay so that guests could bring their yachts to the Royal Palm Hotel docks, and Miami experienced its first tourist season as wealthy northerners spent the winter here.

Meanwhile a revolution was in progress in Cuba. General Weyler, Spanish leader, had established concentration camps in which he herded old men, women, and children, crowding them into wretched quarters where they died by thousands. Indignation was running high when on February 15, 1898, news came that the battleship *Maine* had been sunk. Two months later, with the United States at war with Spain, Admiral Cervera sailed from Cape Verde Islands with a strong fleet bound for America.

The War Department sent seven thousand soldiers to Miami. An attempt was made to build a fort in Brickell Hammock, but it was never finished. The troops remained until fall, their presence a boon to the city's too numerous merchants.

Soon after the soldiers were withdrawn a yellow fever epidemic struck, the town was quarantined with armed volunteer guards patrol-

ling the city borders, and Government and State health officials took charge. Out of 263 cases there were 14 deaths.

During 1898 Dan Roberts, with three companions, penetrated the wilds south of Miami, paving the way for homesteaders in that rich agricultural region that is now known as the Redlands. In October the people of Lemon City had a ball to aid in "building the Lemon City and Miami rock road now in the course of construction." Scarcely more than two years old, Miami began to take its political position in the county seriously.

In his *History of Dade County, Florida,* Tracy Hollingsworth gives the various locations of the county seat as follows: Brickell Point, Cape Florida, Fort Dallas, on Biscayne Bay between Buena Vista and Lemon City, and in Juno. He might have added Indian Key, Key West, and, about 1840, in whatever part of the country W. C. Maloney, the county clerk, might happen to be. An election held in 1888 gave Juno the preference and in March the records were transported through the Everglades in an Indian canoe to the up-county town where they were deposited in temporary quarters until a courthouse could be built.

The State law specified that the location of the county seat could not be moved more than once each decade and, with its growing population, Miami decided to reclaim the seat it had lost ten years before. This was accomplished and in 1899 the county records were removed to Miami where they have remained.

Juno was never incorporated as a city. Back in the nineties, besides the county buildings, it boasted of seven dwellings, two boarding houses, and a newspaper. The county offices were contained in a white, two-story, frame building having three rooms on the first floor. One was for the county tax collector, one was a law office, and the third was used by the county judge and the clerk of the court. The second floor was used as a court room. Nearby was the county jail, a building 15 x 20 feet, having a few iron-barred cells.

At first, the county offices in Miami were crowded in a frame building near the river. The cell blocks at the Juno jail were loaded on a barge, transported to the new county seat, and the jail was erected on the northwest corner of the block where the present courthouse now stands.

In 1901 the county floated a bond issue to finance the construction of a new home but the offices remained in the old river warehouse until 1904 when the large two-story stone building was built. On January 23 of the previous year, Flagler deeded to the city the lots on the south side of West Flagler Street east of the railroad for mu-

nicipal purposes. On this site the city erected a fire house in 1907 and, two years later, the old city hall.

The county courthouse, directly across Flagler Street, was already crowded when the boom began, but it was not until September 6, 1928 that the new 28-story building was completed.

Four years after its incorporation, Miami took its first steps in diversification of community interests. Lemon City and Buena Vista were already being drawn into city life as a new coral rock road made travel to the new community an easy matter. In 1900 the 30-year old settlement, Coconut Grove, was likewise drawn closer to Miami as a new road was extended through the hammock jungles on the south side of the city. The Married Ladies Afternoon Club voted to contribute ten cents a week toward buying books for a reading room and laid the foundation for Miami's large public library of today. The men found time to build a golf course and organize a club. During this first year of the new century the city's first Board of Trade was organized.

The town grew slowly and, with men constantly seeking new business locations, competition in all lines of endeavor became increasingly keen. On September 15, 1903, F. B. Stoneman began publication of the Miami *Evening Record,* forerunner of the present Miami *Herald.* In 1904 the city directory contained 256 pages, more than 200 of which were devoted to advertisements and "solid facts about Miami." Even then the palm tree was used to symbolize Miami's tropical climate.

In the same year Miami staged a regatta in Biscayne Bay. The Miami Choral Society gave its first concert, and over on Miami Beach, the swampy island across the bay, Avery C. Smith built a bathing casino.

Smith and a partner, James C. Warr, later organized the Biscayne Navigation Company to take advantage of the five-dollar fare that boat owners charged for transportation to the beach. Their boats, the *Lusitania* and *Mauritania,* largest in the Miami harbor, cheapened the fare and helped popularize the South Beach.

A fire department was organized in 1899, and five years later Henry Chase became the first paid fireman, receiving $45 a month, and remaining on duty 24 hours a day. The equipment, an engine and a hook and ladder, were pulled to the fire by volunteers whose dress uniforms consisted of bright yellow bloomers, green jackets, and red hats. The first motor-driven equipment was installed in 1911, when the personnel was increased to 12 men. The first serious fire occurred in 1909 in the old Halcyon Hotel, where the damage was $5,000.

In 1909 Carrie Nation invaded the city in a whirlwind campaign against alcohol. She charged county and city officials with slackness in law enforcement and confronted them with a bottle of whiskey bought in a saloon on the Sabbath.

The liquor question had been a disturbing factor since May 1896 when the Lemon City "drys" wing succeeded in closing that community's last saloon. Said the *Metropolis*: "The removal of all saloons of our village of Lemon City to Miami is an accomplished fact, significant that there are not enough topers left to insure one a decent living in that business." In 1913, six years before Congress adopted the Eighteenth Amendment, Dade County voted dry by a vote of 976 to 860.

Meanwhile, the spiritual life of the community had become important and several churches had been established. The First Presbyterian Church was organized in 1896, the first congregation meeting in a tent-like building that served for several months as a common shelter for other denominations soon organized. While the First Presbyterian was the first church organized in the city, records in the Gesu Catholic Church show the existence of a mission in 1874 at a place near Miami known as Wagner's Grove.

The present First Presbyterian Church was built on land donated by Henry M. Flagler. The First Methodist Episcopal Church, now the White Temple, was founded by the Reverend L. L. Fisher, district presiding elder, who journeyed to Key West, missed his boat, and, before the next boat sailed, organized the church installing Reverend E. V. Blackman as pastor.

Churches increased in number as the city grew until practically every faith, creed, and belief is now represented, from the old established religious organizations to the obscure groups and cults that are found in every large city.

The first church was established 14 years before Miami obtained a permanent hospital. In 1910 a group headed by Father A. B. Friend organized the Friendly Society and, by popular subscription, raised funds for a small hospital unit. Promoted by Dr. C. J. Erickson, Theodore W. Jackson, and Frank B. Stoneman, this group secured a lot on Biscayne Boulevard north of the News Tower and erected a frame building accommodating three beds.

In 1912 the Friendly Society Hospital was incorporated as the Miami City Hospital. It was moved to Northwest Seventeenth Street and Tenth Avenue in 1917 and its capacity increased to 28 beds. In 1924, in recognition of his many years of service, the city commission again changed its name to the James M. Jackson Memorial Hospital. Additions have been made from time to time and the

hospital now contains over five hundred beds and each year treats thirteen thousand patients, 60 per cent of them charity cases.

Growth of such institutions was accompanied by expansion in other fields. The Florida East Coast Railway had its terminal in Miami only a short time when its surveyors began exploring routes through the lower part of the county and along the islands to Key West. In 1903 the railroad was deep in the Homestead country and in January 1912, Flagler rode the first train into the southernmost city in the United States.

Henry M. Flagler once said there was only 24 miles of railroad in the whole United States in 1830, the year of his birth in Hope, near Canandaigua, New York. His father was a Presbyterian minister receiving so small a salary that Henry had to leave school when he completed the eighth grade.

At 14 he set out for the "Western Reserve," working his way along the Erie Canal to Buffalo and thence to Sandusky, Ohio. He drifted into Republic, Ohio, where he obtained work in a country store for five dollars a month and board. He saved money, entered the grain commission business at Bellevere, Ohio, and prospered. Later, he failed in a salt manufacturing venture at Saginaw, Michigan, and returned to Ohio, $40,000 in debt.

While in the grain commission business, he had transacted business with John D. Rockefeller, who, with a few associates, started his first oil refinery at Cleveland. In 1867, when he built a second refinery, Stephen Harkness backed Flagler as a member of the Rockefeller group, a partnership that was closed in 1870 when the Standard Oil Company was organized.

This was the foundation of Flagler's fortune. By 1883 he was a wealthy man, past his fiftieth year, and ready to retire. In that year he came to St. Augustine, where, impressed by the possibilities for development, he began plans for a modern hotel to attract people of means. As inadequate transportation facilities harassed his building program, Flagler purchased the Jacksonville, St. Augustine and Halifax River Railway. During the years that followed, he built other hotels along the east coast as his railroad was extended southward, and acquired great parcels of land. Flagler remained vital and energetic until his death at Palm Beach in 1913. He was buried in the mausoleum of the church in St. Augustine which he built in memory of his daughter.

A month after Flagler's death, John S. Collins, then 76 years of age, opened his 2-mile wooden bridge to Miami Beach. Two years later saw the incorporation of a new city and the opening of the new ship channel that was to make Miami's port dream a reality.

In 1917, shortly after the United States entered the World War, Miami became a training center for three branches of the government's defense forces. Dinner Key, at Coconut Grove, was established as a naval aviation base in 1917. The Navy operated an aerial bombing training station on the bay shore opposite the Royal Palm Hotel but when practice became annoying to guests the station was moved to Deering Island. At the peak of its activity about one thousand officers and men were stationed at Dinner Key. Five large hangars in triple hangar units housed the flying equipment.

In 1918 the government obtained a field west of the Miami Canal and south of the present 36th Street, from the Glenn H. Curtiss Company, acquiring also the planes and equipment for the training of aviators in the Marine Corps. A group of eight officers and 110 men arrived in the first detachment from Bay Shore, Long Island, and were later joined by groups from Lake Charles, Louisiana; Pensacola, Florida; and Parris Island, South Carolina. Four squadrons trained at this field were sent to France and another went to the Azores. The field was returned to the Curtiss Company in 1919.

Chapman Field, which served as an army training base during this time, was likewise abandoned at the close of the war, but was reopened in 1931 and is used intermittently for gunnery practice.

As the twenties began Miami adopted the commission form of government. Coral Gables opened as a carefully planned development; the first plat of Hialeah was drawn and the future town named. The city's population now numbered over thirty thousand but many vestiges of the village days still remained.

Chief among these relics was the electric utility sytem, which, although it had been brought up to date a number of times, was still inadequate. Between 1896 and 1899 several attempts were made to promote an electric plant in Miami but it remained for Flagler to add a 45-KW gasoline-driven generator to his hotel to supply the town with electricity for street lights and private use. The gasoline engines used were started by means of compressed air. Sometimes the supply of air gave out before the engine started and neighbors were called in to line up along the main drive belt. If the engine failed to start, the few downtown streets remained in darkness.

A separate plant was built in 1904. Two generating units were brought from a hotel at Nassau and installed in a building on the site of the present power plant on the Miami River. This system used cord wood or "four foot coal" as the Negro firemen called it. When wood became difficult to obtain in 1913, a change was made to coal supplied by schooner to Mayport, Florida, southeast of Jacksonville at the mouth of the St. Johns River, and thence by rail to

Miami. The women of the town complained so loudly as the soot soiled the Monday morning washing that in 1916 another change was made to Mexican oil.

In bringing the electric light plant up-to-date little provision was made for future expansion and many additions were made between 1907, and 1925.

In 1919 criticism against the Flagler-owned utilities grew bitter as electric and water service became more unsatisfactory. A storm partially destroyed the station equipment in 1922, and as other accidents followed, the greater part of the city was for long periods without lights. Two years later the American Power & Light Company, with the approval of the city officials, leading bankers, and business men, purchased the electric utilities in Miami, Miami Beach, and near-by communities.

The year which marked the passing of the old Miami Electric Light & Power Company was one of "loose" money and restless enterprise. Miami's municipal advertising campaign which began in 1915 with a $1,900 fund was bringing phenomenal returns. Tourists, promt to anticipate speculative opportunities, showed local residents a few tricks in quick real estate profits and before the year was out avid speculators had tacked an "easy money" sign on the map of Dade County. In the mad rush that took place in the following year many bankers and conservative business men took the plunge into the maelstrom of business activity that ended in bankruptcy.

Following the World War, northern business men establishing new shops and new homes in Miami created a definite market for subdivision property, acreage close in at a reasonable figure. Even as late as the midsummer of 1924 such land could be purchased at two to five hundred dollars per acre. Operators and syndicates opened elaborate ground floor offices on Flagler Street, hiring high-pressure sales managers to train sales forces. Their success was so spectacular that the demand for more subdivisions sent the prices of land to two and three thousand dollars an acre. A year later land six and eight miles beyond the city limits sold for twenty to twenty-five thousand dollars per acre while desirable parcels brought as much as forty thousand dollars. During that year, 1925, 971 subdivisions were platted and 174,530 deeds and papers filed by the county clerk. Building operations consumed 400 miles of awning material and 7,000 carloads of lumber as 481 hotels and apartments were built in a 12-month period.

This extensive building program and influx of home buyers sent the prices of business property rocketing as million-dollar deals became commonplace. Two and three-quarter millions were spent on

the Roosevelt Hotel whose unfinished hulk, a mile away from any comparable structure, rises 14 stories from a maze of small shops and stores that have sprung up at the end of the County Causeway. Downtown, the Congress Building increased from 5 to 18 stories at a cost of a million dollars. The Colonial Towers sold for $1,250,000 and the Shoreland Arcade for 4 million dollars. A record was established when the Charles Deering estate north of Buena Vista sold for $6,500,000.

One of Miami's picturesque hotels, the Halcyon, begun in 1901 and enlarged and altered several times thereafter, was acquired by Thomas J. Peters, one of Miami's pioneers, for $338,000 in 1911. He refused an outright purchase offer of 5 million dollars for this property in 1924 and another in excess of 6 million dollars the next year. His income from the hotel for the year ending April 30, 1926, was $519,000 yet in 1934 the Halcyon went under the hammer and sold for $333,600.

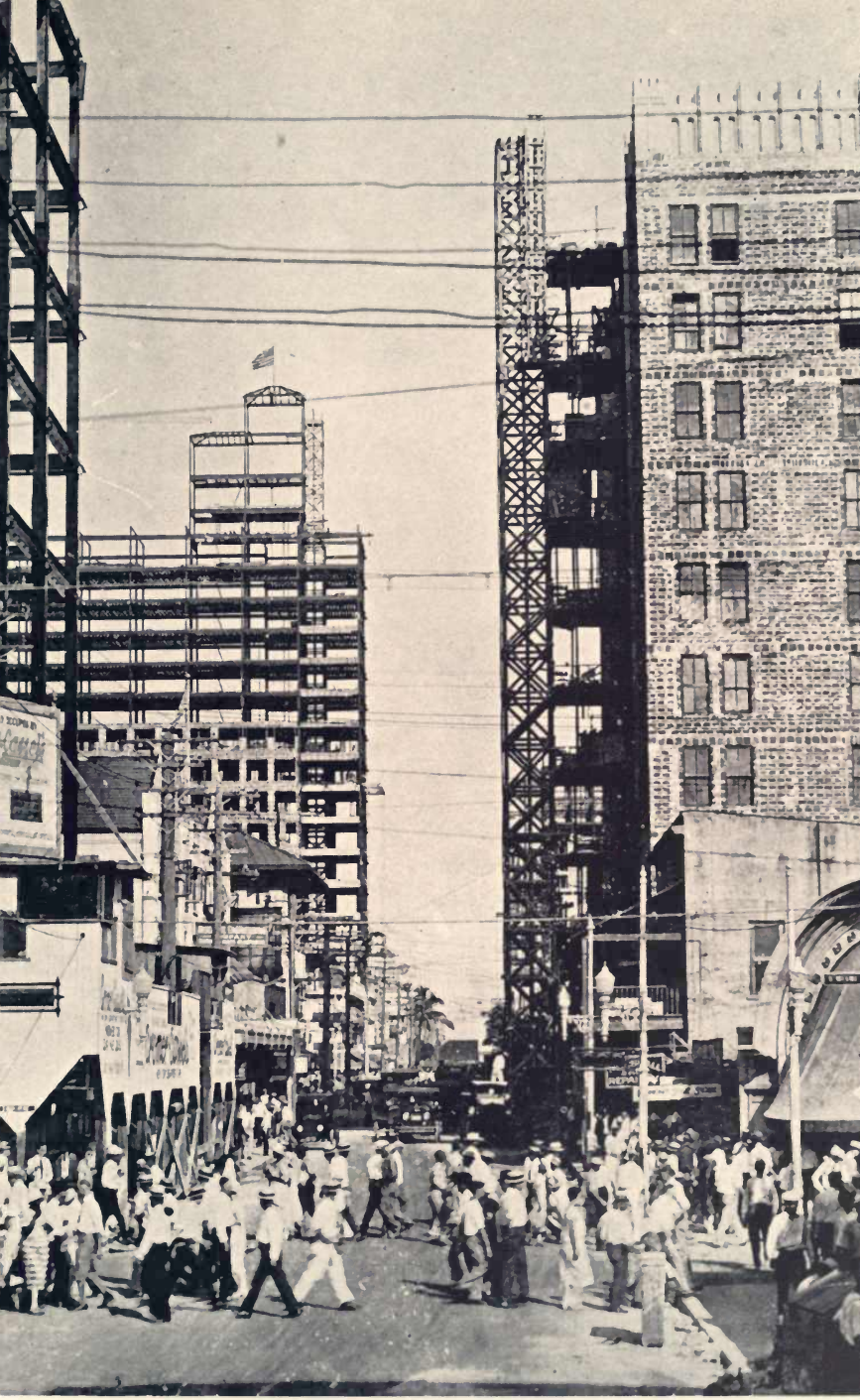
Dade County narrowly escaped another fissure that year as a cry arose for the creation of a Redlands County to include the farming country below Miami and extending to the Keys but the proposal was squelched. Miami Beach sought to absorb everything along the seacoast from the Broward County line to the lower end of Virginia Key but its northern ambitions were opposed by Miami Shores.

The Miami Jockey Club, built by Joe Smoot and his associates was the subject of a proposed investigation into gambling conditions. Evelyn Nesbit Thaw was refused a cabaret site downtown, because, some said, it might hurt the community if she operated in the shadow of the Halcyon Hotel, long thought of as a monument to its designer, the dead Stanford White. William Jennings Bryan was receiving $100,000 a year to deliver his sales lectures for "Miami's Master Suburb," Coral Gables.

It was a year for innovations. Hollywood had its phosphorescent golf ball course. The Postmaster General asked for bids on the first air mail from Miami and word came that Henry Ford was considering the operation of an air line to the city with his new monoplanes.

Meanwhile buyers and speculators continued to pour into the city. The real estate market was a bedlam as salesmen literally "sold each other." During 1925 Miami issued 7,500 real estate licenses. The Seaboard Air Line Railway was unable to buy a right-of-way into Miami until $1,500,000 in cash and land, the result of a monster mass meeting of interested parties called by the Chamber of Commerce, was given the railroad.

Toward the close of the year the Federal Reserve banks stiffened



Miami in the Making

Dade County Courthouse . . . Miami

Biscayne Boulevard

Miami

Miami-Biltmore Hotel . . . Coral Gables

Night

Outdoor Classes . . . University of Miami

Center of Miami Beach . . . Lincoln Road

Ocean Promenade . . . Miami Beach

Ancient Mangrove Tree . . . Biscayne Bay

their rediscount rates; the freight embargo continued. many financial houses began curtailing their loans. Some operators found themselves obligated for large income tax returns on profits which were still on paper which the banks now refused to handle.

By spring 1926 the boom was definitely over, despite the promotion efforts that featured Mary Garden in a grand opera presentation held in a tent. But signs of prosperity and progress were still everywhere in evidence. Hundreds of structures were completed and 21 millions of dollars in new building work was under way. The million dollar senior high school and the Southern Baking Company's million dollar plant were both about completed. A paving company was laying 2 million dollars' worth of new streets for the expanding town.

In September real estate men were still hopeful. The Tamiami Trail across the State was being rushed to completion. Two huge dredges were already in the bay preparing to work on a new channel and harbor. Everywhere were signs of continued activity. Miami citizens were only vaguely interested when, on September 17, a hurricane was reported off Turk's Island and headed for the mainland.

A gale hit the city that afternoon. As darkness closed in the storm was over Nassau and, rushing westward, it struck the Florida coast soon after midnight, closing in on city after city with a force and fury no newcomer believed possible.

The first onslaughts demolished the power lines and plunged the city in darkness. The gale whipped weather-recording instruments from their moorings, scattered lumber piles like so much kindling, and tore at concrete-block buildings. For nearly eight hours the wind and rain poured over the city. Day broke and citizens saw vacant lots where their neighbors' houses had been. Fallen trees, limbs, bits of lumber and other debris littered the streets; all shrubbery was blasted and stripped of its leaves.

Abruptly the wind and rain stopped. The barometer stood at 27.75 inches, the lowest ever recorded in the city. People were not then acquainted with the character of tropical hurricanes. They did not know that the "core" or "eye" of the storm, then passing over, was a sharply edged disc of dead calm, or that the concave form of this disc armed with teeth of typhonic winds was racing toward them. They left their home to view the wreckage, to salvage their scattered belongings, or to see how friends or relatives had survived the storm.

Then without warning the hurricane struck again. The wind that blew from the north in the van of the advancing storm was now, on the eastern side of the gigantic storm disc, blowing from the south. Debris that had settled in spots sheltered from the north wind

was picked up and rained like bullets upon unfortunate travelers. Buildings, strained and weakened from the first attack, especially the hurriedly and cheaply constructed affairs thrown up in the height of the boom, collapsed like matchwood. The wind tore them in pieces and hurled the parts against other buildings to create still more damage. One man reported seeing a 2 x 4 driven, like a stake, through a 12-inch oak tree. The downtown streets were covered with broken glass, brick, mortar, and cement blocks.

Late in the afternoon the storm passed. People again crept from their shelters to view the havoc. There was no power, lights. telegraph, telephone, or other means of communication, and no water.

Sunday morning a makeshift radio station was set up where the 439-foot steel towers of the Tropical Radio station had blown down. A message was relayed to the outer world through a passing ship. Headlines on newspapers throughout the Nation screamed of the death and disaster that had swept South Florida in the greatest catastrophe since the San Francisco earthquake.

Before count of the dead or estimate of damage could be made, donations for relief began to pour in to the Red Cross and cooperating agencies. The Red Cross received more than 3 million dollars. William R. Hearst sent a special train with one hundred doctors, nurses, and engineers into the storm area. The late President Machado sent a gunboat from Havana with a detail of doctors. The National Guard moved in but there was remarkably little looting and no need for martial law.

In Dade County 113 known dead were recovered and 854 were treated in hospitals. In Miami two thousand homes were destroyed and three thousand damaged. Damage along the water front was particularly severe as warehouses and piers were leveled. The two big dredges about to commence work on the harbor-deepening program, were on the bottom of the bay. Nearly 140 boats at anchor in the harbor and in the Miami River were aground.

Nearby towns fared no better. At Fort Lauderdale twelve hundred homes were destroyed, and thirty-six hundred were damaged. At Hollywood one thousand homes were gone and two thousand were in need of repairs. Miami Beach suffered most from damaged gardens and from 2 to 4 feet of sand the storm left lying in the streets. Coral Gables suffered least of all.

Recovery was rapid as citizens' committees took charge of restoration with "dictatorial" powers in districts allotted them in accordance with plans developed by Governor John W. Martin and Mayor E. C. Romfh. In ten days the National Guard was disbanded and the citizens' committees surrendered the powers that had been con-

ferred upon them. The city, declared a press statement, had returned to normal.

The season that followed was one of bitterness and disappointment. Tourists were definitely afraid of south Florida and many stayed away. Those who did come saw the scars that remained. The set-back was a terrific shock. For years mention of the word "boom" was taboo. City publicity pamphlets and Chamber of Commerce bulletins, for almost a decade, were hard pressed for cheery and propitious material. Building construction diminished rapidly while the permanent population, based on school enrollment figures, somehow continued to grow. Taxes became increasingly difficult to collect but the city officials were reluctant to admit a collapse in realty values or make adjustments in assessments.

The assessed valuation of property declined from a high of $389,648,391 in 1926 to $317,675,298 in 1928. These figures dropped to $167,519,892 in 1929, and sank to $97,871,000 in 1934.

Miami, however, had one asset that no man-made institution nor blunder could destroy: its climate had not changed. Moreover, the foundation of a great city was already well laid. Dwindling property values had neither chilled Miami winters nor had the hurricane leveled its well-constructed buildings.

Under the leadership of the older residents, the city pulled itself together. It continued to spend large amounts for advertising. There was a steady trickle of business and some progress. Even in 1932 building permits totaled $1,067,427, and by 1934 they increased to $2,896,471. Tourist travel continued to mount.

Much credit may be ascribed to enterprises, started long before and completed during this period. During 1928 and 1929 inter-ocean mail and passenger air service was extended to Latin-American countries. The new Tamiami Trail tapped other tourist cities on the West Coast. The Greater Miami Airport Association was established at the time as was the All American Air Meet which now brings approximately one thousand planes to the city each year.

In 1931 horse-racing was resumed as Hialeah and Tropical Parks were opened to the public. Chapman Field, which had served as an army base during the World War, was reopened. The growing Pan American Airways opened lines that touched the capitals and principal cities of South America making Miami that year second only to New York as an American port of entry.

Some of the long distressed property began to change hands on a still depressed market; by 1935 there was a decided upward swing in real estate sales and men began satisfying city tax liens with city bonds then selling at approximately 50 per cent of face value. Tax

sharks set up offices, bought tax certificates, and foreclosed on property which they sacrificed on a steadily rising market.

On Labor Day a hurricane swept Florida keys killing between three and four hundred veterans and civilians, most of whom were employed in the construction of the Overseas Highway. About one hundred bodies in plain, unpainted wooden boxes, were brought to Miami for burial when health officials banned further importation.

Relief parties continued to find bodies and down on Matecumbe the pile of coffins mounted higher and higher under the blazing sun, and toward the end of the search, identification of remains became impossible.

One Sunday afternoon, in the midst of a solemn gathering, a Protestant minister, a Catholic priest, and a Jewish rabbi, stood before the long stack of coffins. Together they read the funeral services for the dead of their faiths. Gasoline was poured over the gigantic pyre, and a great pillar of black smoke leaped up to darken the afternoon sun. Matecumbe, well named by the Indians as a "place of weeping," had again taken its toll of human lives.

Early in November Miami was visited by another hurricane that passed over in a few hours. Few people were injured. Most of the damage was to trees and shrubbery; the streets were cleared in a few days. Many citizens said the coming tourist season was killed and that the real estate market would be wrecked for that year; but Miami, Miami Beach, and Coral Gables enjoyed their best season since 1926.

In the four years since 1935, more than 100 million dollars were spent in building. Vast improvements were made as merchants installed modernized store fronts. One large industrial firm erected a 16-story office structure; and more than ten thousand new residences were built.

Miami's progress was largely determined by its geographical position, its resources, and the aggressiveness of its developers. Julia Tuttle thought Miami might become the center of a great citrus producing area. The Brickells hoped to make the city the center of a cigar manufacturing industry. Even Flagler visioned it as a small winter resort, and was reluctant to install improvements needed by the expanding population. Since that time various groups have sought to make Miami an aviation center, a seaport to handle South American goods, and an American Monte Carlo.

Each of these groups has had some measure of success, and their combined efforts have overcome many obstacles.

CULTURAL LIFE OF MIAMI

MIAMI'S lusty youth and boisterous sports life are a product of the crude frontier life it has so recently left behind. The city's swift rise from a small country town to metropolitan proportions tends to obscure a concomitant cultural life that manages to flourish in the midst of a continually shifting and heterogeneous population.

Most of Miami's citizens were reared in other states and countries; they have not only a wide diversity of social inheritances but they come to Miami for many different ends and purposes. Everything is too new and the people are too lately met to have developed a characteristic form of thought or expression. Many newcomers found clubs and societies the only outlet for their thoughts and energies. These organizations multiplied so fast that today approximately 500 of one kind or another exist in the city and from them a distinctive community spirit is slowly but surely developing.

The first of these, The Housekeeper's Club, organized in 1891 in Coconut Grove, is still in existence. It is chiefly recreational in purpose.

It is doubtful if any organization is more deserving of public recognition than The Miami Woman's Club. Founded in 1900 as the Married Ladies' Afternoon Club, the members used their weekly dues of 10 cents to buy books for the use of the circle. In three years they accumulated nearly 1,000 volumes and, in 1905, opened a public reading room. It became known as the Woman's Club of Miami on May 7, 1906. Henry M. Flagler gave the club a tract of land and they opened a public library in their own building there in 1913. A year later the city made an annual appropriation to assist in its maintenance.

The activities of the club provided trees for school yards, tuberculosis relief, canning clubs, better baby contests, domestic science classes, and making hospital supplies for soldiers. It also sponsored lectures, chautauquas, and concerts.

Having outgrown their quarters, the Flagler estate permitted them to dispose of their downtown building and erect a larger one at Northeast Seventeenth Terrace where their library has grown to more than 40,000 volumes. They maintain scholarships at the University of Miami, sponsor art exhibits, foster various club programs, and are

interested in legislative measures for the welfare of women and children. The name of the organization was changd to The Miami Woman's Club in 1925.

Another vital group, the Parent-Teacher Association of Dade County, organized in 1920, includes 51 individual associations with a total active membership of approximately 11,000. It watches educational progress and keeps a jealous eye on child welfare. In 1938 it began the acquisition of a library on vocational subjects for the junior and senior high schools.

In addition to these, Miami has a number of clubs whose paramount interest lies in civic issues. Combined, they are a formidable group and a moving force in community life.

Miami is the cradle of the Florida Association of Music Clubs, organized in 1917. Among them are the Miami Music Club, sponsoring civic music concerts and the Tuesday Morning Club, a self-supporting organization of limited membership but with wide social connections. Mana Zucca, who began her career at the age of four in Berlin's famous Bechstein Hall, is the founder of a club bearing her own name and has for its purpose the encouragement of local talent. The Cardinal Club is unusual in that its membership is limited to music lovers of 70 years or more.

The University of Miami Symphony Orchestra was long under the direction of the late Dr. Arnold Volpe, pupil of Leopold Auer of the Imperial Conservatory at St. Petersburg. Guest artists appearing with the orchestra include Mischa Elman, Abram Chassins, Josef Hoffman, and the Westminster Choir. Other university musical organizations are the symphony band, the Aeolian Chorus, and a string quartet.

Among the bands, orchestras, choral organizations, and other musical groups, Miami has its American Legion Drum and Bugle Corps and a Junior Chamber of Commerce Drum and Bugle Corps. Both groups have been under the direction of Caesar La Monica who, for more than ten years, has also directed the open-air band concerts at Bayfront Park.

The Miami WPA Music Project provides instruction for underprivileged children and its orchestra gives three programs each week. Two are sponsored by the City of Miami and one by City of Miami Beach.

Miami's musical history would be incomplete without some mention of the Seminoles. Little has been written into music depicting their courageous, persevering life or their folklore. Efforts have been made to secure and preserve the songs of the Seminole but very little has actually been accomplished. Minnie Moore Willson obtained some

of their songs after long years of studying the Indians near her home in Kissimmee, Florida, and Frances Densmore obtained a number of phonograph recordings during her work for the Smithsonian Institution.

Mrs. Minnie March began teaching music the same year that the railroad reached Miami. Even before that Kirk Munroe, writer of boys' stories, had settled with his wife, daughter of Amelia Barr, in Coconut Grove. From his pen we have his historical work, *The Flamingo Feather* (1887), *The Coral Ship* (1893); *Through Swamp and Glade* (1913).

Even earlier in time of arrival was Ralph Middleton Munroe whose life is so intimately connected with the early history of the Grove. Collaborating with Vincent Gilpin, he wrote *The Commodore's Story* (1930), an autobiography portraying the romantic beginning of the Grove and the people who made it the interesting place it is today.

Charles Torrey Simpson who made his home in the Little River section of Miami was a naturalist and the author of a number of books dealing with the south Florida peninsula.

Dr. John C. Gifford wrote an historical study of the Seminoles entitled *Billy Bowlegs and the Seminole War* (1925), and *The Rehabilitation of the Florida Keys* (1934) and other essays, all studies of local natural life.

Isidor Cohen, John Sewell, and Tracy Hollingsworth, at different times, have each written a book dealing with the life and history of Dade County and Miami.

Natalie Grimes Lawrence is noted for her one-act plays, *Galapaygos* and *Hurricane* (1931), both of which have been produced on the legitimate stage.

Vivian Yeiser Laramore, poet laureate of Florida, published her collection of *Poems Inspired by Florida* in 1932. She is also compiler of *Florida Poets*, in several volumes.

Marjory Stoneman Douglas, short-story writer, published her O. Henry memorial prize story, "He-Man," in 1927. One of her more recent stories, based on the hurricane which swept the keys in 1935, is "September Remember."

Other authors and lecturers who have made their winter homes in Dade County are Damon Runyon, Hervey Allen, Padraic Colum and his wife, Mary Colum, Eunice Tietjens, George Kibbe Turner, Bonnie Busch, and the late Floyd Gibbons.

The National League of American Penwomen, with local headquarters at Miami Beach, includes a membership roster of many additional names.

Miami's theatrical history contains no names of glorious memory. When the city became large enough to support a theater the legitimate stage was already giving way before mechanized entertainment. The few feeble attempts to establish a legitimate theater in Miami came to naught and today, except for a few locally sponsored plays, vaudeville or revue, the motion picture theater holds the field.

Theatrical history goes back to 1896 when a local group essayed the production of minstral shows in an old shack grandiloquently called "Budge's Opera House." A more suitable structure, "Prout's Opera House," was later erected near Northeast First Street and Miami Avenue. The reason for its failure is not recorded but it is possible that, at the time, Miami was too far from regular booking circuits to secure good talent.

In 1906 a Mr. Kelly opened a movie theater in the Hatchet Building on East Flagler Street. Not far away W. F. Miller and C. O. Richardson opened another, named the "Alcazar." Miller filled the space beneath the floor of his building with ice and tried to make his theater comfortable by forcing cool air through it with the aid of electric fans, Miami's first air-conditioned structure. Miller went out of business when Kelly succeeded in introducing vaudeville shows, but competition immediately entered the field as Henry Chase opened a movie on Northeast First Avenue.

In 1908 Kelly opened "The Gertie Reynolds," soon afterward acquired by James McQuade, wealthy Miamian and husband of the popular actress, Gertie Reynolds, for whom the theater was named. There, among others, the Pickerts, a traveling family stock troupe, presented plays for a time but the competition from the movies was too strong. The Pickerts, on retiring from the stage, returned to south Florida to make their home on Miami Beach.

With the field cleared the movie theaters entered upon a little war of their own with one operator giving away pianos and automobiles. It was an era of experimentation and progress; playhouses were crude and uncomfortable, camera technique and film reproduction far from perfect, and the delivery of films made schedules difficult to maintain. As the city grew and lost its rustic attributes, the theaters, adopting a new psychology, became more sophisticated in point of appearance and comfort. Saturday and Sunday, particularly Sunday night, attendance became so marked that a protest arose from Miami pulpits. The protest changed to an attack as waiting lines of movie patrons blocked the sidewalks on Sunday nights. The fight swelled to a crusade and the churches, for a time, succeeded in closing the theaters but they were eventually permitted to reopen. Miami's

present richly appointed, air-conditioned motion picture theaters with their luxurious lounges, fortune-telling nooks and coffee patios are a far cry from the sweat boxes of a quarter century ago.

During the twenties a group of theater lovers founded the Civic Theater of Greater Miami. Its first president was Henry Salem Hubbell and its membership included Ruth Bryan Owen, Willard Hubbell and wife, Daniel Frohman, Edgar Lee Hay, and Marjory Stoneman Douglas. The association produced plays until 1934. The Miami Players present legitimate plays in the city today.

The theater people have their organized group, the Actor's and Showman's League of Miami, formed in 1935, with headquarters at the Chess Club, and a membership of more than 300.

Miami's painters and sculptors have their own center in the Academy of Arts. Many galleries and collections are available to tourists but a few are not open to the public.

Two of the most popular exhibition points in the Miami area are the Miami Art Center, and the Coral Gables Art Center of the WPA Florida Art Project.

The Miami Art League permits both professionals and students to meet in one group and paint from life models. The Thursday Sketching Club is open to all artists.

Among Miami artists are: Denman Fink, portraits, murals, illustrator, and Henry Salem Hubbell and C. Chandler Ross, portraits; Gustav Bohland, sculpture; Mrs. Gustav Bohland (Aileen Parnell), sculptor; Mrs. Spencer Kennard, miniaturist; William Wood, water color portraiture; Will Grefe, magazine illustrator; Richard Merrick, etchings; Cora Parker, painter of gardens; Lewis Painter Clephane, painter; Ralph H. Humes, sculptor; Jean Jacques Pfister, painter; Carl Campbell, flower painter; Dumain Weaver, painter; Louise Zaring, painter; Dewing Woodward, founder and president emeritus of the Blue Dome Fellowship, internationally honored in portraits and murals.

Gustav Bohland, a Bohemian by birth, is not only a sculptor, but a metal craftsman and a writer. His love for nature brought him to Florida.

Mrs. Myrtle Taylor Bradford, who received international recognition for her paintings and poems, is State art chairman of the Florida Federation of Women's Clubs.

EDUCATION

IN THE early eighties, the State superintendent of schools assigned a teacher to the section of Dade County rather vaguely described as the Biscayne Bay region. The teacher traveled from place to place teaching the children in their homes, and was paid $40 a month.

The first organized school established in the Biscayne Bay region started with 10 pupils at Coconut Grove in 1886. Mrs. Henrietta Trapp was the teacher. The first term was held in a one-room log cabin, the property of Samuel Rhodes. Pupils were later transferred to a small frame building which is still in existence.

In 1887 or 1888 a school taught by Harlan Trapp was opened in Lemon City, now a part of Miami.

Miami proper established its first public school sometime during the winter of 1895-96 at the corner of Northeast First Avenue and Third Street with an enrollment of about twenty pupils. Prof. R. E. McDonald was the principal.

The Biscayne school, a short distance north of Lemon City, was opened during the same year. Mr. F. Page Wilson, the first supervisor of this school said, "The district was organized but it would scarcely do, in an official report, to describe the exact methods by which an eager community met the legal requirements for a new school."

The determination of early citizens to provide educational facilities for their children is illustrated in the story of Captain C. J. Rose who came from Ohio in 1891 to take up a homestead in the territory west of Miami, where a little community sprang into being. Their request for a school was granted when the required ten children were enrolled, but as there was some delay, the captain and his neighbors secured driftwood from the beach and built their own school house.

At that time the country about Miami was wild and undeveloped. One Miami teacher in Coconut Grove "toted" a pistol because of the prevalence of panthers in Brickell Hammock through which she passed each morning on her way to the schoolhouse.

In addition to a few simple books, the standard equipment in those early schools included a leather strap, a shotgun, a bottle of ammonia, and a jug of whiskey. The whiskey was used for emergency treatment of snake bites; the shotgun to scare off inquisitive tramps or prowling Indians. Ammonia is a long-standing remedy for the re-

lief of scorpion stings while the leather strap, probably because it made more noise, was thought more effective than the well-known "hickory stick" for enforcing discipline.

The establishment of these first schools marked the beginning of a long series of difficulties brought about by the rapidly increasing population. Hurriedly constructed buildings were overcrowded from the date of their opening, particularly during the boom. Twenty-six schools for white children and six for colored, were erected between 1923 and 1926. In addition, the school board provided 150 one-room portable schools at various locations to take care of the 1925 increases. Attendance during that period rose from 11,733 in 1923 to 31,770 in 1926.

The county began the year 1939 with an estimated enrollment of 46,000 pupils, 1,345 teachers and 89 schools including, for white children, 45 elementary schools, 16 junior high schools and seven senior high schools; for negro children, 14 elementary schools, six junior high schools, and one senior high.

Cafeterias operate in 53 public schools under the auspices of the local Parent-Teacher Association units. Heavy duty equipment is furnished by the school board while the P.T.A. supplies utensils and tableware and is required to operate on a nonprofit basis and without expense to the school tax funds.

One of the difficulties facing the city schools is that of providing facilities for children of tourists. In midwinter months of each school year approximately four thousand additional pupils must be enrolled and assigned to proper grades. In Miami Beach during 1935-36, the opening enrollment was 1,185 and the closing, 1,322, but at one time 2,184 students attended school. Nonresident pupils in the county are required to pay a tuition fee to provide funds for the hire of substitute teachers.

Schools operate on the six-three-three plan. Elementary schools care for children of the first six grades. Pupils remain in one room throughout the day and receive instruction from one teacher. Junior high schools are departmental. The day is divided into six periods and the students pass from one classroom to another for instruction in their various subjects. In the seventh and eighth grades pupils follow a definite course of required studies but in the ninth grade certain courses are elective.

Ninth grade credits are transferred to the senior high school and included in requirements for graduation. High scholastic standards are rigidly maintained and student graduates are accepted by practically all standard universities in the United States.

Specialization is a marked feature of every high school. Miami

Edison High School has a successful radio department, a boatbuilding department, and an agricultural department with a nursery which supplies a great number of plants and shrubs used for beautifying school grounds throughout the country.

Miami Senior High School, one of the largest in Florida, is the only local school having a printing department. Its newspaper, the Miami High *Times,* has for eight consecutive years won first place in a national contest sponsored by Columbia University.

Besides these public schools in Dade County, there are four parochial schools with an enrollment of more than two thousand pupils and about 35 other private schools offering instruction in art, beauty culture, business subjects, dancing, dramatics, music, as well as elementary subjects and college preparatory courses.

The latter guarantee the tourist pupil a minimum loss of time arising from transfers from home schools. This is made possible by personal supervision, home textbooks, home tests arranged by the instructors and returned to home schools for grading and recording. Many of these schools feature out-of-door classes when weather conditions are favorable. Students pursue their regular studies gathered in small groups about tables protected from the sun by large, bright beach umbrellas.

The University of Miami, a co-educational institution chartered in March, 1925, opened in October, 1926, with a boom-time endowment of $8,500,000. Much of this endowment was lost in the depression years that followed and, when one creditor entered suit to collect his debt, the university was saved from extinction by the appointment of a Federal receiver. Later, the university purchased its assets when they were sold by the receiver.

During those precarious years the university established a sound position for itself in the community and its enrollment steadily increased until, with a student body of over thirteen hundred members, it has become the third largest college in the State. It consists of a college of liberal arts and four schools, granting degrees in education, business administration, law, and music.

Most of the work is conducted in the University Administration Building, a large three-story, triangular building originally designed for a hotel, which contains the offices, class-rooms, laboratories, studios, an auditorium, a theatre workshop and other facilities for students. The university also owns a number of near-by buildings used as dormitories, and a 100-acre tract of land, acquired for future expansion.

Features, noteworthy in a college of its size, are a law library containing more than twelve thousand volumes, and a smaller library on

Pan-American affairs and relationships widely used by the student International Relations Club, sponsored by the Carnegie Endowment for International Peace.

The university maintains a keen interest in promoting closer business and cultural relations with Central and South American Republics and has arrangements with several of their universities whereby an interchange of students is effected. In the school of business administration, the department of Latin-American Relations provides intensive training for those students who plan to establish future connections in these countries.

Among the courses offered in this department are: South American History, Latin American History, Latin American Heroes, Spanish-American Colonial History, Latin American Relations, Latin American Culture, Survey of Spanish Literature, History of Caribbean Countries, Latin American Comparative Constitutional Government and Institutions, International Law, Latin American Literature, Economic Geography of South America, Latin American Diplomatic Relations, Economic Legislation of South America, Latin American Political institutions, Spanish Civil Government, and others.

In addition to special courses supplementing the regular courses in the Spanish language, the university has, on its resident faculty staff, several outstanding educators and statesmen from various Latin American countries.

Further efforts to promote good will and understanding between the people of our two continents is evident in the success of a Pan American Forum, or Institute, conducted at the university for several weeks each winter.

AGRICULTURE IN DADE COUNTY

WITH the exception of the metropolitan area, Dade County is essentially agricultural. The jungle of the early days—hammock and glade matted with tough trailing vines, mangrove swamp and forest—has given way to long plowed furrows; fields of green foodstuffs; citrus groves, and acres of tomatoes.

Not only can south Florida produce almost anything that can be grown, but it produces much that is grown in other sections at a time when most fields are bare. Because of its latitude Dade County is protected against sudden temperature changes by the Atlantic Ocean and the Gulf of Mexico, and becomes an all-year growing section. This enables the grower to produce marketable crops with but little competition, and to realize more than a normal income from this off-season supply.

Of the 1,412,480 acres in the county, 64,254 are farm lands with approximately 44, 259 acres under actual cultivation. Soil types may be roughly divided into four classifications: pine lands, marl prairie, the black muck of the Everglades, and hammock.

The county's scattered pineland soils are responsive, and with ample rains, a little skill and some fertilizer, the grower may expect to obtain the soil qualities he desires. In the Redlands District, in south Dade County, the pineland soil, of firm, iron content, red-clay consistency, is admirably adapted to all kinds of finer citrus growing, tropical fruits, and general farm products. All of this section is underlaid by limestone rock, difficult to blast and clear, but yielding a soil which resists acidity and conserves both moisture and fertilizer.

The prairie acres, so long considered worthless, now embrace thousands of acres of finest tomato-growing soil, which is composed of marl, sand, loam, and these in various stages of combination. Manganese, added to the fertilizer on some of these lands, acts as a sort of catalyzing agent, releasing fertility otherwise held dormant.

Perhaps no land has been so misunderstood as the muck of the Everglades, the prevailing peat soil over approximately five million acres in the 'Glades. This soil is the result of the decay, through thousands of years, of sawgrass and other aquatic vegetation, plus a small quantity of fish and other animals. Today, under a system of drainage and water control, 64,259 of these acres have been put under cultivation, principally in sugarcane, winter vegetables, and straw-

berries. Under proper conditions the soil is surprisingly productive, much of it replanted year after year without much fertilizing.

Hammock is the Florida name for a jungle of hardwood trees and the enriched land built up from their foliage decay. This soil has been found to be richer than most of the upland soil, most available tracts probably being on the keys. Some of the finest hammock land in the State along the shore of Biscayne Bay has been cut up for building operations.

As suggested by the wide range of these soils, from the thin sandy pineland to the moist prairie and rich organic muck, a great variety of crops are grown. The number will be increased with fuller control of water conditions on the low lands and with more extended knowledge. This is still a new country; its agriculture presents difficulties and problems quite unknown elsewhere, and there has been as yet no time for the standardization of aims and methods attained in older communities.

Dade County has been aptly called the Land of the Tomato Kings. Approximately 20,861 acres are given over to this crop, with an estimated net value of $2,509,800. The average cost of raising tomatoes is put by the large growers at about $125 per acre. Average yields may be stated at two hundred crates per acre, and the profits range from one hundred dollars to three or four times that amount. The crop movement of a tomato district will average one hundred cars per day during the season's peak.

Beans rank next to tomatoes in importance. It is a quick crop, coming to maturity in six to eight weeks. While hampers have brought $1.50 and more, an average all-season price may be quoted at $1 and the yield 125 hampers per acre, with growers using good brands of fertilizer doing considerably better. Like most other crops, beans need spraying as a protection against disease and pests, and on large fields this is sometimes accomplished by airplane.

Not so many years ago it was popularly supposed that the ordinary Irish potato would not grow in Dade County. Now, in one marl prairie section in the south end of the country there are 8,640 acres averaging a yield of 192 bushels, grading 80 to 85 per cent No. 1's and coming in two or three weeks ahead of the north Florida crop. Peppers, a good crop under favorable conditions, are harvested from early December until late May. Cabbage, cucumbers, egg plants, chayotes (a tropical perennial form of climbing squash) and practically all the other usual vegetables are grown both for home consumption and shipment.

Long ago, Dade County won its fame in grapefruit production and continues to carry the honors. The season is about three weeks

ahead of other localities with no disastrous freeze ever recorded. In the Redlands Section where the water is close to the surface, it is not uncommon to gather the last of the passing crop a few weeks before the new crop is ready to be picked.

Some of Florida's finest grapefruit, along with other citrus fruits, many of which are scarcely known to the outside market, are grown in the Redlands region.

In one experimental grove, a fine seedless grapefruit is being developed with seven distinct varieties of orange, the choicest being the Valencia. With larger and richer Persian limes, and Perrine lemons, many other cross-fruits are being developed.

Notable among the various crosses are the King of Siam orange, the tangerine, the pineapple orange, Temple orange, Lue Gim Gong orange, the kumquat, Thompson and Foster grapefruit, and many others. On a six-in-one grafted tree may be found six highly cultivated varieties of orange and grapefruit.

Orange groves are scattered through most parts of Dade County, the fruit noted for its thin skin, superior flavor, and extreme juiciness. Marketing may begin as early as September, with about five per cent of the crop moving in October, and the remainder going to market from November to February. It is usually shipped in carload lots or entire train shipments. With improved refrigeration on steamships, there has been a steady increase in water shipments. Dade County is concentrating on the production of limes and lemons. These fruits are susceptible to the slightest cold and grow best in a subtropical climate.

Strawberries are an example of northern fruit which is grown successfully in south Florida with a simple shift of season. It proves a most profitable cultivation from December to June. The soil on which strawberries are grown in this area is a firm marl or muck. Some phenomenal yields have recorded 10,000 quarts to the acre, but a fair average is around 2,500 quarts. An interesting feature of strawberry growing in the Miami area is a "skyscraper" arrangement whereby the berries grow out of holes, tier on tier, in barrels or concrete containers that not only conserve space but produce clean, luscious fruit free from sand or other impurities.

The Florida banana is undergoing scientific treatment in some groves in the county, especially with a view to lessening its starch content, but it is not grown commercially.

Many of the tropical fruits of the region have been introduced from the Orient, where for ages they have been staples. South Florida has many groves of the avocado, or alligator pear, a well-balanced, nutritious, easily digested food. Several of the finest varieties orig-

inated in Dade County, now the site of the largest groves and most persistent development. By careful selection of successive varieties, it is possible to enjoy the fruit practically every month in the year.

The aristocratic mango is largely confined to Dade County, and local demand so far exceeds the supply that little of this fruit finds its way to outside markets. The choicest and most delicious variety is the Haden, which originated in this area.

The rapid-growing papaya, superficially described as "a melon that grows on a tree," is one of the most luscious of all tropical fruits. Both leaves and fruit contain a high percentage of vegetable pepsin of remarkable digestive and medicinal properties. The life span of a tree is two or three years, but it is not uncommon for a single tree to yield 150 to 300 pounds of fruit during its first year.

From the sapodilla tree comes chicle of commerce, the basic principle of chewing gum. This russet-skinned, sweet-flavored fruit, spinning from a long, thread-like stem, is popular on local fruit stands.

The guava, Carissa, Surinam (bright-wrinkled) cherry, and rose apple, equally delectable to eye and taste, are among the fruits grown on a small scale, chiefly for preserves and jelly.

There are dozens of other similar fruits in the Miami area, some of which have been cultivated with encouraging results. The region is the site of two important institutions; the United States Plant Introduction Gardens at Chapman Field, which tests new plants and trees, and the State Tropical Experimental Station in the Redlands, which demonstrates the best grove methods for those now in cultivation.

A large number of rapid-growing fibers thrive in south Florida. Ramie, from which the Egyptians made mummy wrappings four thousand years ago, is eight times stronger than cotton and can be spun much finer. Its cost of production is less than that of any fiber known. Flax and sisal also can be grown here.

Dairymen in the Miami area face a problem in the production of forage crops to replace beet pulp and other imported bulk feeds. This situation is being overcome as experiments continue with grasses, which have grown for ages in other tropical countries, and thrive here. They include Para, Napier, Merker, Sudan, Bermuda, Johnson, Natal, and Japanese cane. These crops need little care and some attain a height of 10 to 12 feet. Soilage crops include cane, corn, and beets with a few attempts at ensilage. Beets range from 20 to 30 tons per acre, cane from 25 to 30, and corn from 10 to 20 tons per acre. Summer crops include Higiri, corn, millet, cow peas, soy beans, and peanuts.

About sixty dairies, some of them with large purebred herds, supply the cities of Dade County with high-grade milk. A difficult

problem is presented by the wide margin between normal consumption and the peak of the winter season. Another is the fact that so much of the feed has to be imported.

The entire region is tick free, and cattle raising and fattening in the 'Glades promises to assume large proportions. The low shelter cost, all-year-out-door conditions, and ample water are factors not to be ignored.

Poultry products are brought into this territory in enormous quantities despite increased local production. Local producers have the advantage of an even climate and green feed all year around. Against this must be counted the cost of grain, since practically all of it must be imported.

A network of good hard roads, two railroads, ample refrigerator car service, two large deep-water harbors, precooling plants and steamship lines, to which may be added airplane facilities for the rapid shipment of flowers and baby chickens, provide the growers of this area with modern transportation.

Co-operative packing plants in the principal shipping districts dispose of crops in many markets of the country, either on consignment or by f. o. b. sale at or near the farm. The usual channels, including growers' markets, are provided for the local retail trade.

INDUSTRY

ON THE Jefferson Davis Military Map published by the War Department in 1856, that part of Dade County lying along the coast was designated as "Coontie and Hunting Grounds."

Until recent years, coontie roots were extensively used for food by the Seminole Indians. White men discovered that coontie would yield a good grade of starch, and this became Dade County's first industry. Thomas and George Furguson built a mill on the Miami River in 1845. Another pioneer, Adam C. Richardson, engaged in the industry for twelve years. At one time C. Eskilson used coontie roots to prepare a product known as "Florida Food" which was sold in Northern markets.

In the manufacture of coontie starch, the roots are washed, peeled, ground, and soaked in water. The starch settles to the bottom and the impurities float on the water, later to be drawn or screened out. Several washings are required to produce a good grade of starch, which is then dried in the sun and broken up for packing in barrels. By these crude methods two men could produce in about two weeks two 240-pound barrels which netted them $15.

In the early 1880's Ralph Middleton Munroe and others in Coconut Grove established a factory for canning pineapple, fish, and jellies but due to lack of transportation facilities, the venture did not succeed.

Later a factory, devoted to the manufacture of cushions and mattresses from prepared Spanish moss, was located on the south bank of the Miami River west of the Miami Avenue bridge. It ceased operations when the supply of moss became limited.

As far back as 1908 Miamians began to make special efforts to attract industries to the city. In that year the Brickell family "conveyed two hundred building lots and a square block of land in the center to the Board of Trade" with the understanding that funds realized by sale of the lots were to be used to secure the establishment of cigar factories. The plan to make Miami the center of a cigar manufacturing industry never materialized though there are now 10 factories in the city, one of which has 50 employees.

In addition to the numerous sawmills that sprang up to supply lumber to the first railroad and remained to furnish building material to the first settlers in Miami, there was one unusual industry that

has been discontinued since tractors have been adapted for general agricultural purposes. J. A. Dann, Miami pioneer, invented a "muck-shoe," a large, flat iron disk, turned up in front and provided with bands for fastening to mules' hoofs. This "snow shoe," as it was sometimes called, enabled planters to get crops started in low ground from three to four weeks before the normal season.

J. A. Dann was engaged in general blacksmithing, carriage, and wagon work according to an advertisement appearing in the Miami *Metropolis*, July 11, 1902. In the same issue there appeared the advertisements of one cigar manufacturer, one Chinese laundry, one boatbuilder, and five building contractors. Now, 38 years later, building construction continues as the most important industry engaging the services of more than 180 general and specializing contractors.

Beginning with the arrival of the Florida East Coast Railway in 1896, and later, when travel by automobile became more extensive, thousands of tourists poured into Miami. Many of them became permanent residents while others continued to return regularly each winter season. To meet the housing needs of the rapidly increasing population was an enormous task.

Some idea of the rapid building development in this area may be gained from a few comparative figures pertaining to Miami Beach. In 1921, in that city, there were five hotels, nine apartment houses, and 114 residences while in 1935, hotels numbered 112, apartment houses 397 and residences 1,953. During the past three years there have been built 66 hotels, 231 apartment buildings, and 770 residences.

In 1915 the valuation of new building, based on permits issued in Miami, was but $769,040. In 1916 the valuation rose to $1,925,033. This figure grew larger each year until 1926, the peak year, when permits for the greater Miami area totaled $103,572,507. Building activity dropped to its lowest level in 1932 but since that year a substantial increase has taken place. In 1935 the dollar volume for all types of building construction in Miami, Miami Beach, and Coral Gables was $15,621,206. It totaled $26,604,231 in 1936 and $26,025,779 in 1937. Building permits for these three cities rose to $29,422,094.50 for the year ending December 31, 1939, with permits in Miami Shores, Surfside, Miami Springs, Hialeah, North Miami and South Miami raising the total to $31,875,708.50.

Next to building, the largest industry in Dade County is dairying. Pioneers still remember when Dr. James M. Jackson's cow arrived in the city. School children, many of whom had never seen one, were given a holiday to observe it and the lucky cow was accord-

ed the privilege of grazing on the greenest and most fashionable lawn in town, that of the Royal Palm Hotel.

In 1926, 3,200,000 gallons of milk were produced in the Miami area and 1,000,000 gallons were imported to supply the local demand. Approximately 25,000 gallons were used for manufacturing purposes. In 1928, 2,900,000 gallons were produced, 100,000 gallons imported, with more than 550,000 used for making ices, ice cream and other products. During 1939, 6,920,000 gallons of milk were produced, none imported, and more than 694,082 gallons were diverted into manufacturing channels.

With better harbor and more extensive anchorage facilities provided, boatbuilding, outfitting, and repairing came to rank third among Miami's industries. The Miami River is the site of a rapidly growing drydock industry. One of the largest covered yacht basins in the South, accommodating more than 80 average sized vessels, is located on the north bank of this waterway. Another plant, built during 1938 at a cost of $500,000, is provided with a 1,000,000 cubic-foot warehouse and 1,830 lineal feet of berthing space for yachts, cruise vessels, and freighters. A survey, covering only the larger locally owned and other yachts entering the port of Miami shows that $4,257,000 was expended in this city for the direct upkeep and maintenance of 550 of these vessels.

Miami and Dade County use many locally produced raw materials in the manufacture of novelties and utilitarian articles: coconut and shell lamps, fish-scale pins, fern baskets, serving trays, ash trays, grotesquely carved masks and figures bizarrely painted, lawn furniture and ornaments, and scores of other objects. Coconut and palmetto fibre, stone, shells, and bamboo are used extensively in these industries. In 1926 the mayor of Miami described painted coconuts so effectively in a radio speech that manufacturers were overwhelmed with orders requiring several months to fill.

Tropical plants supply products for a long list of Miami industries: perfumes, candy, crystallized fruits, fruit juices, soft drinks, canned fruits, meat tenderizers, cosmetics, jellies, preserves, marmalades, and oil extracts. For some time experimentists have been cultivating foreign plants, the source of certain drugs, which are now imported into the United States.

In addition to numerous processing and servicing plants which, because of their diversified work, are difficult to classify, greater Miami has over 500 establishments engaged in the conversion of raw materials into finished products. Fishing tackle, automobile batteries, metal products, paper boxes, brooms and brushes, fertilizers, leather goods, tile, mattresses, paint, furniture, and many others are included

in the sixty-odd classes of products of these industries which employ nearly 7,000 men and women and create an annual payroll of about $8,000,000. Many of those products have a large local distribution but increasing shipments are being made throughout the United States, Canada, and foreign countries.

One of the newer Miami industries is a film studio which employs 325 people and produces the animated motion picture cartoons, "Betty Boop," and "Pop Eye." In 1939 "Gulliver's Travels," a full-length cartoon in technicolor was produced, the world premiere showing being featured at a Miami Beach theatre in December, 1939.

Following 10 years of sporadic surveys, during which several oil companies obtained vast leases in South Florida, geologists revealed that the substrata underlying this area are of the same general formation as those from which more than half the world's oil supply has been taken. In May, 1938, one oil company began an intensive survey using a specially constructed amphibious tractor suitable for Everglades work. This tractor or "swamp buggy," as it is sometimes called, transports a crew of six men together with supplies and scientific instruments, including a short-wave radio set. It travels on pneumatic tires, 10 feet high and three feet in diameter, provided with cross cleats which give the machine a speed of eight miles an hour in water.

A test well was started west of Miami in the latter part of 1938 and in January, 1939, had reached a depth of 2,500 feet. During the same month it was revealed that a contractor on the Overseas highway project, discovered a gas pocket while blasting for rock on Bahia Honda and secured a temporary lease covering oil rights on that island.

Other investigations tending toward further industrial development include experiments with the production of fiber, cellulose, and oils. Meanwhile, civic organizations point out the opportunities for assembly plants and light manufacturers in connection with South American trade areas and continue their efforts to promote industries that will tend to improve the seasonal unemployment which now occurs in Miami during the summer months.

TRANSPORTATION

MORE than half a century elapsed between the establishment of Dade County and the opening of the first regular line of communication connecting the Miami area with towns to the north. It was only a hack line — mule-drawn buggies — operating between Lemon City and Lantana. To the south Coconut Grove was reached only by boat. The Miami River was a waterway used chiefly by the Seminole when they emerged from the Everglades to fish in the bay or trade at William Brickell's store on the south banks of the river. In 1891 Julia Tuttle, surveying her isolated possessions on the north side of the river and speculating on Henry Flagler's conferences with Henry Plant, traced the enterprises of these two men as they drove their railroads farther and farther down the Florida coasts.

The nineties were a decade of expansion throughout the State. The Internal Improvement Board, freed of its legal entanglements when it realized a million dollars on the sale of 4 million acres of land to Hamilton Disston, was again in a position to aid in railroad building after 1881. During the next two years the state legislature passed 30 bills providing charters and aid to railroads.

The Jacksonville, Tampa and Key West Railway Company secured a charter in 1881, and in 1887 and 1888 built a railroad from Jupiter to Lake Worth. The rolling stock consisted of one wood-burning engine, two passenger cars, and as many freight cars. When Flagler built the Royal Poinciana Hotel at Palm Beach he paid this road nearly $60,000 in freight bills. Passengers traveling to the new Dade County Courthouse, built at Juno in 1890, paid a fare of ten cents per mile. This railroad, the first in Dade County, became known as the "Celestial" railroad from the stations Juno, Neptune, Venus, and Jupiter on its line.

After his deal with Mrs. Tuttle, Henry Flagler extended his railroad, now known as the Florida East Coast Railway, from Palm Beach to Miami. The first train reached here April 15, 1896. At the same time Flagler inaugurated a regular boat service to Key West. Lost on its first trip, the steamer *Shelter Island* was replaced by the *City of Richmond,* later renamed the *City of Key West.*

Miami merchants soon learned that freight rates from northern terminals to Key West were from 25 to 40 per cent cheaper than railroad rates direct to Miami. They ordered their goods shipped to

Key West, transferring them by private schooners to Miami at a substantial saving. This continued until Flagler System officials built a fence along their holdings shutting off access to the water.

It was the beginning of a contest during which sections of the fence disappeared by night and the railroad men engaged in repairing the breaks by day. It was not until 1910 that the railroad and merchants established peace with general interchange of freight between boats and railroads.

On June 21, 1900 the Plant Line, operating steamships between Tampa, Key West, and Havana, merged with the Florida East Coast Steamship Company, and, incorporating under the laws of Connecticut, formed the Peninsular and Occidental Steamship Company with Henry M. Flagler as president and Morton F. Plant as vice-president. The channel to Cape Florida was deepened to 12 feet and extended from the Royal Palm Hotel to the company's docks above Sixth Street. Service was continued until 1908 when Flagler's railroad, penetrating the Redlands toward Key West, reached Knight's Key, which was then used as a steamship terminal because of its deeper water.

Flagler was not the first man to dream of a railroad across the sea to Key West. In 1870 a group of builders were granted a charter for the "Great Southern Railroad" which, though never built, was planned to extend from Millen, Georgia, through Jacksonville, Orlando, and on to Key West. Flagler, however, was the first to make a comprehensive survey of the possibilities of such a railroad.

The Fitzpatricks and Gossmans joined Dan Roberts and other homesteaders in the Redlands section producing crops that were hauled to small schooners at Cutler for shipment to Northern cities. The railroad reached Homestead in 1904. Men and equipment were at hand to begin the gigantic task of driving the road across the keys, a feat that was accomplished in 1912, after eight years of gruelling labor.

Among those who sacrificed their lives in the construction of this railroad was J. C. Meredith who lies buried in the old City Cemetery, at Northeast Second Avenue and Nineteenth Street. Over his grave is a bronze table bearing the following inscription: "In memory of Joseph Carroll Meredith, chief engineer in the construction of the Key West extension of the Florida East Coast railway, who died at his post of duty on April 20, 1909. This memorial is erected by the railway company in appreciation of his skill, fidelity and devotion in this last and greatest task of his life."

Before the Key West extension had reached Homestead, the Tatum Brothers Company had laid out Miami's first subdivision,

Riverside, on the south side of the river, but the city was also building up on the Lemon City side toward the north. A flimsy wooden bridge had been built across the river at Flagler Street and in 1905, when the population had nearly reached the 5,000 mark, the Tatums conceived the idea of building a street railway to their holdings.

They purchased second-hand equipment and laid tracks on Miami Avenue from the northern city limits at Eleventh Street southward to Sixth Street where the line made a loop to the railroad depot on Northeast Second Avenue. Returning to Miami Avenue the streetcar tracks continued southward to Flagler Street and then ran west to the Miami River. Later, by paying a toll, they extended the line across the river to Sixth Avenue in the midst of their subdivision. The one car comprising the "system" was propelled by storage batteries.

The line began operating in July, 1906 and continued in service for one year after which the tracks were taken up and the cars and rails sold for duty in another city.

Even then there was some dissatisfaction felt as community leaders realized that Flagler, controlling all the railroad and harbor facilities, virtually held the embryo city in his grasp. Agitation for city ownership of the waterfront crystallized and a committee of inquiry brought from the railroad an offer to sell all its waterfront holdings from Southeast Second Street to the north side of the present P. & O. docks, including channels and improvements, for a little less than $500,000. The offer was not accepted by the city due to the protests of some groups who were embittered against Flagler and it was nearly ten years later before the city acquired the property at a cost of $1,000,000.

The town was still without a public transportation system. Bicycles were used to such an extent that one pioneer estimates 5,000 were at one time in use. At Sunday church services the parking racks were so jammed that early arrivals were perforce the last to leave the church premises for their bicycles were surrounded by those of hundreds of other church-goers.

Old-timers chuckle at the memory of cycling costumes they wore in those days. The voluminous 11-gored skirts worn by the women and their petticoats with three yards of lace-trimmed ruffling that sometimes caught in the sprocket wheel brought grief to more than one feminine cycling enthusiast.

It was a little later that John S. Collins, then 74 years of age, decided to develop part of his 1,600 acres on Miami Beach into residential properties and enlisted the interest of the late Carl G. Fisher in the construction of a wooden bridge across the bay. This bridge

remained in use until acquired in 1920 by developers of Venetian Island, who rebuilt the bridge, and later constructed an island studded causeway known today as the "Venetian Way."

During the decade of the World War the foundation was laid for Miami's present position in aerial transportation, a development which later became so important that in 1927 the city established a department of aviation. When Miami celebrated the 15th anniversary of its incorporation in 1911 the city paid the Wright brothers $1,000 a day for an airplane exhibition The Wrights sent a plane piloted by Howard Gill. Following the celebration, enthusiasts attempted in vain to persuade the Wrights to establish a school of aeronautics at Miami.

Later, the Glenn H. Curtiss Company entered into negotiations with the city whereby they received $1,000 for freight charges on a shipment of four planes to be used at a landing field 200 by 800 feet, located in Allapattah, and built by the city at a cost of $3,000. This was the fourth landing field built in America.

The Curtiss interests later built an airport, with facilities for both land and sea planes, on Miami Beach near the present site of the Fleetwood Hotel. It was moved in 1914 to a site on the edge of the Everglades, and a few years later was taken over by the Federal Government for training fliers in the United States Marines.

The Dinner Key seaplane base, now headquarters for the Pan American system, was established in 1917, when the United States entered the war and Chapman Field, a training base for army fliers, was acquired the succeeding year.

It was about that time that Miami's long-delayed plan for harbor development began to materialize. In 1896 J. W. Sackett of St. Augustine was in charge of a government survey to determine the best route for a deep water channel into Biscayne Bay. In 1899 Congress appropriated funds for harbor development and again, in 1902, another act was passed creating a plan whereby the city cooperated with the Federal Government in opening a channel direct to the sea, and known as the "Government Cut," through Fisher's Island. The city, in 1915, began work on a channel, 105 feet wide and 18 feet deep, extending from the Government Cut to a turning basin 600 feet wide and 800 feet long. The city also built a concrete pier 1,000 feet long, and a warehouse 250 by 60 feet, in addition to the construction of railroad facilities. About the same time on the western side of the city, work began on the Tamiami Trail, to connect Miami with cities on the lower west coast.

The city had long ago attained a population large enough to warrant an up-to-date transportation system. The Miami Traction Company, in 1914, had laid tracks from Buena Vista along Northeast

Second Avenue to Flagler Street and west on Flagler Street to Twelfth Avenue. The line was later extended to a baseball park at Sixteenth Avenue and Northwest Fourth Street. The cars used storage batteries for power and it is related that passengers were frequently obliged to help push the car up the hill at Thirteenth Avenue. The car barns were destroyed by fire in 1921.

The remaining property of the Miami Traction Company was purchased by the city in 1922. Carl G. Fisher who built and was operating a street car line to Miami Beach, was called to operate the city street cars. The equipment was augmented, improved, and an overhead trolley system was installed.

The boom precipitated an urgent need for better means of transportation within the city. Members of the Miami Bus Association met in 1925 and agreed to adopt 20-passenger busses instead of jitneys, one bus permit being granted for every two jitney permits. The Miami Transit Company was organized, and motor busses put into operation in January, 1926.

The boom was also responsible for other transportation problems. A group of men had determined to convert a 241-foot sailing vessel, the *Prinz Valdemar*, into a floating night club. While being towed from the Miami harbor to Miami Beach it ran aground and completely blocked the channel.

The accident tied up hundreds of boats including large liners and freight vessels that were ready to give up their berths at the docks to make room for waiting vessels to discharge their cargoes. Political controversy began as the city commission laid plans to dredge a channel around the stricken boat. After a week's delay, the Federal Government sent Col. Gilbert A. Youngberg from Jacksonville to clear the harbor.

Before the work was finished another boat, the *Lakeport*, grounded in the outer channel and for several days tied up all movement west of Fisher Island.

These incidents contributed to further harbor development but not, however, without factional bitterness involving civic leaders. John B. Orr and the Miami Planning Board submitted a plan for a deeper channel with a chain of islands, to be built from the spoil, extending from the Miami dock to Fisher's development on Peninsular Island. The islands were to be the sites of warehouses and piers and to be connected with the mainland by a railroad. The low islands lying south of the channel today are a result of this plan. Dredging the channel to a depth of 25 feet was completed in 1927.

During the boom period Miami was still served by but one railroad, the Florida East Coast. Freight shipments became so heavy that

in August, 1925, coupled with a shortage of labor and storage facilities, cars could not be emptied. It took six days for a car to traverse the distance between Jacksonville and Miami. At last, when 800 cars were waiting to be unloaded on sidings in Miami and 1,300 more crowded the side tracks to Lemon City, the railroad declared an embargo against all building equipment and supplies. By fall, before the embargo was lifted, 7,000 cars, billed over the Florida East Coast, were waiting at Jacksonville.

The embargo, of course, did not apply to foodstuffs, and one enterprising builder, badly in need of materials, had a carload of bricks consigned to him as lettuce. The car was carefully iced from the time it left its northern terminal and the ruse was not discovered until it reached Miami.

Until 1920 the Venetian Causeway Company owned the only highway between Miami and Miami Beach. In 1916 the commissioners of Dade County decided to use the spoils on the north side of the ship channel for a road, and the County Causeway was opened to traffic in 1920.

Discussion of a third causeway to Miami Beach began in 1924 with several development companies requesting projects extending eastward from Thirty-sixth Street and Fifty-fourth Street. In July, Dade County granted a franchise for a proposed causeway at Seventy-ninth Street. The project was approved by the war department in March, 1925.

The proposal of a second toll highway became a matter of public concern and in an election held in September, 1925, it was voted to make the new causeway a public thoroughfare. The county began construction in 1927 and it was opened for public use in 1928.

In early days bicycle races were held on a road, known as the "Boulevard," that extended from the Royal Palm Hotel northward along the Bay. In 1924 Hugh Anderson, president of the Miami Shores Corporation which controlled a great deal of property above Thirteenth Street, proposed a plan for extending and beautifying this road. Details were worked out in 1925 by the Biscayne Boulevard Committee, and work began on Thanksgiving Day.

The construction involved cutting through 23 city blocks, opening right-of-way through 14 blocks more and widening four additional miles of roadway to connect with United States Highway No. 1 at Fifty-Fourth Street. Acquiring the right-of-way cost the city $1,800,000 and a total of 86 buildings, including apartment houses and hotels, were either razed or moved to other locations.

The traffic division of the Miami police department was unable to cope with the congested street conditions brought about by boom-

time activities. Despite the protests of a few merchants, traffic lights were installed in the downtown area and a number of thoroughfares were designated as one-way streets.

The traffic patrolmen, often new and inexperienced men, were immediately troubled by the problem of "jay-walking." One of the patrolmen lost his temper one day when a pedestrian ignored his command to observe the traffic signal. The officer drew his gun and fired, the bullet wounding another man half a block away.

The collapse of the boom did not end progress in the increase of transportation facilities. By 1931 Miami became one of the largest ports of entry in the United States. The development of the Pan-American system at Dinner Key has made it the largest international air line in the world. By land, 75 per cent of the Nation's population is within eight hours' flying time from Miami through connections with the Eastern Air Lines. These two systems together with existing government, municipal, and private fields give Miami a total of 13 air bases. The payroll derived from aeronautic activities totals more than $2,000,000 annually.

Another harbor-deepening project costing $2,000,000 was completed and approved in December, 1935. From a sea buoy nearly three miles off shore, a channel 500 feet wide and 32 feet deep extends to a point inside the jetties where it narrows to 300 feet and continues at a depth of 31 feet to the east bend of the causeway. From this point to the turning basin the channel is but 200 feet wide while the turning basin was enlarged to a size of 1,150 by 1,200 feet.

Improvements in railroad service have steadily increased since the Seaboard Air Line, which includes the names of 106 railroad companies, extended its tracks to Miami in January, 1927. During the winter of 1933-34 this line introduced the first air-conditioned train operating between New York and Miami and, in 1939, inaugurated the first regular Diesel-powered, streamlined, electric trains running between the same cities.

Following the 1935 hurricane which destroyed many parts of the Key West extension of the Florida East Coast Railway, receivers for the railroad pleaded their inability to rebuild and were permitted to discontinue operating the line which, it is said, cost the Flagler interests $49,000,000 to build. Their holdings, from Lower Matecumbe to Big Pine Key, were acquired by the Toll Bridge District of Monroe County for a consideration of $640,000 and the original plan, including bridges, for an overseas highway to Key West which was started in 1924, was now put into effect.

The total cost was $7,400,000 including a PWA loan of $3,600,000. The project involved the construction of decks surmounting

the railroad bridges, the longest of which is seven miles. There are 545 smaller bridges on this new highway; 316 80-foot spans, 19 60-foot, and 210 53-foot bridges. During the first years of its operation, 158,356 motor vehicles traveled the highway, carrying 417,000 people who paid $236,969 in tolls.

Improvements in transportation facilities continue in 1940 as a 105-foot channel is being dredged from the bay to Coral Gables to provide yacht anchorage.

NEWSPAPERS AND RADIO

THE freight service, inaugurated soon after the completion of the Florida East Coast Extension to Miami in 1896, brought to the town a printing press for the publication of its first newspaper, the weekly *Metropolis*. Editor W. S. Graham and his partner Wesley M. Featherby circulated the first copies on May 15, of that year. The paper was crudely printed, six column, full size. A bid of one dollar was made for the first copy.

In March, 1898, S. S. Burlingame replaced Featherby as local editor. In April, 1898, Featherby gave way to E. T. Byington, and in September of the same year Featherby once more resumed the editorship in association with his younger brother, C. G. Featherby. Management changed hands again in December, 1899, when B. B. Tatum acquired the paper.

Tatum had worked as a mill hand at Kissimmee and later at Bartow where, in partnership with one of his brothers, he became part owner of a sawmill. In 1887 he acquired the *Polk County Informant*, and during the next few years successively controlled the *Advance-Courier*, the *Informant*, the *Courier-Informant*, and the *Herald* of Rome, Georgia.

Under Tatum, the *Metropolis* increased its news coverage and, in 1903, when the paper had a circulation of fifteen hundred, made it an eight-page daily. During this time Tatum was also engaged in a real estate business which demanded so much of his time that he organized the Miami Printing Company to absorb the paper and made S. Bobo Dean, secretary and treasurer. Dean secured a half interest in the paper in 1905. Tatum sold his interests in the *Metropolis* to A. J. Bendle who, in 1915, relinquished his holdings to Dean. For eight years Dean retained control and in 1923 sold the paper to James M. Cox, newspaper man of Dayton, Ohio, and a candidate for the Presidency in 1920. Shortly afterward the paper was renamed the Miami *Daily News and Metropolis*.

Finding the presses inadequate Cox ordered more equipment and in 1924 purchased a site at Sixth Street and Biscayne Boulevard, where the million-dollar 26-story "News Tower" now stands.

When the Miami *Daily News and Metropolis* opened its new plant in July, 1925, it observed the event, as well as its twenty-ninth anniversary, by producing a special edition of 504 pages. Fifty carloads of paper and one and a half tons of ink were used in printing this

issue. Each copy weighed seven and three-quarter pounds. In 1934 the name, "Metropolis" was dropped, and the paper is now known as the Miami *Daily News*.

Frank B. Stoneman, another pioneer newspaper man, came to Miami from Orlando in 1903 and entering into a partnership with A. L. LaSalle, Sr,, launched the Miami *Record*, an evening daily. A few years later they opened negotiations for the purchase of the Miami *News*. In spite of the fact that the deal was not consummated a new masthead was adopted, the *Morning News-Record*, and the paper changed from evening to morning publication. The LaSalle-Stoneman Company was later reorganized and Frank B. Shutts, a young attorney who came to Miami the year before assumed joint control with Stoneman, on December 10, 1910. The paper was then renamed the Miami *Herald*.

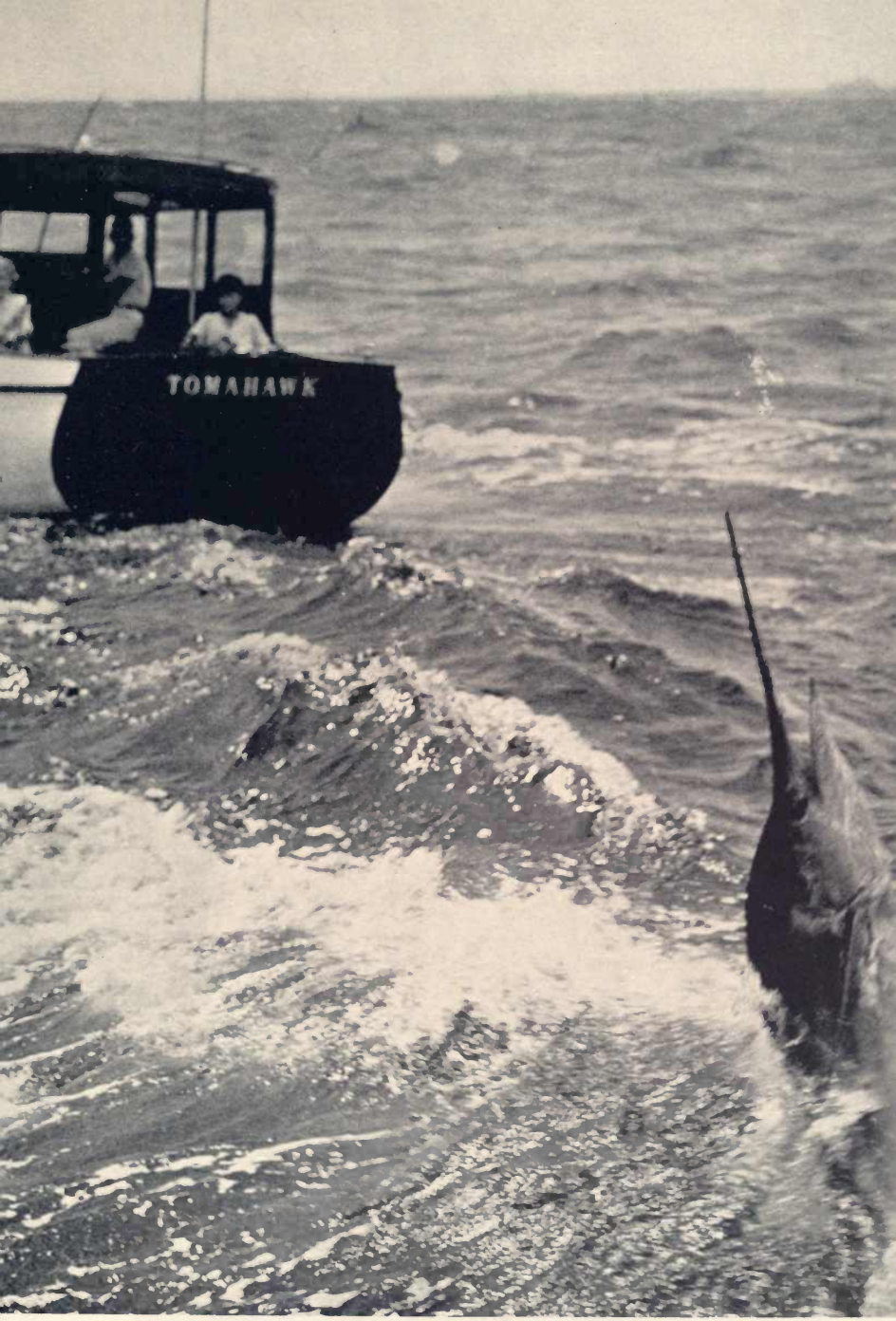
In 1923 the *Herald* was equipped with a 16-page Goss Junior press. Later it bought a Hoe press that had served the Denver *Post* for 20 years which could still turn out a 32-page paper; but in 1924 increased business over-taxed its facilities. A second-hand 24-page Scott press was secured in 1925 and set up in a garage while a new four-story building to house a battery of modern presses was being built.

The *Herald's* two original antiquated presses ran on a 24-hour schedule while harassed printers tried to keep them together. As Kenneth Ballinger says in his *Miami Millions* the presses "shed nuts and bolts like a love-sick maiden's tears." So great was the demand for advertising space that the paper refused as much as 15 pages in one day.

When the new building was completed and the giant new presses were ready for operation, the boom was over. The shining machinery idled along while the city retrenched for a decade but the equipment purchased to take care of boom business found full use in the late 1930's.

The volume of advertising printed in the *Herald* during the first six months of 1924 when Miami was establishing records for real estate transfers, put it in first place among the world's newspaper . The daily average was over 50 pages. Eighty-eight pages of advertising was not uncommon and the Sunday edition often carried 112 pages or more.

The *Herald's* advertising in January, 1926, was twice that for any single month in 1925 during which year it established a world's record with 42,500,000 lines, 12 million more than any ever carried in a year's time by any newspaper. Advertising lineage for 1937 was 12,801,297.



Hooking a Sailfish in the Gulf Stream

Charter Boats for Gulf Stream Fishing

Fishing Boat Pier

Lummus Park and Beach . . . Miami Beach

Promenade . . . Hialeah Race Track

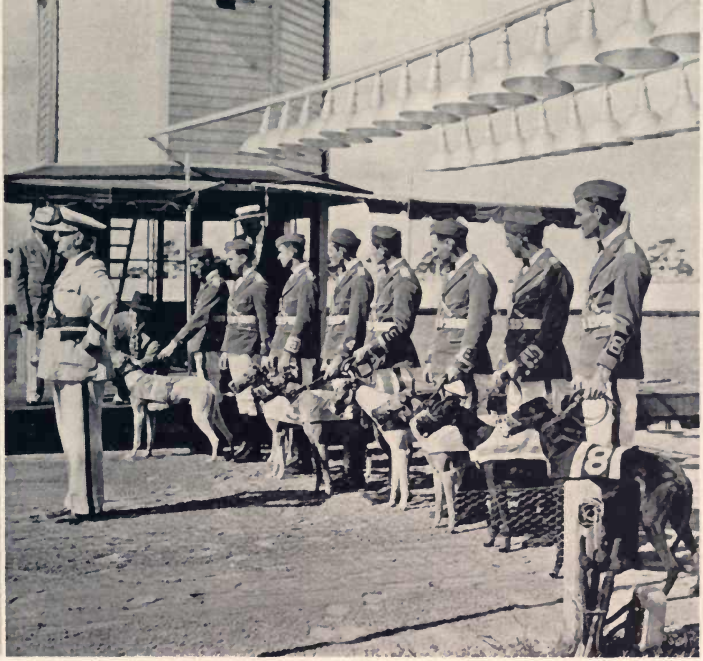
Paddock . . . Hialeah Race Track

Outdoor Opera . . . Bayfront Park . . . Miami

Between Halves . . . Orange Bowl . . . Mid-Winter Football Game

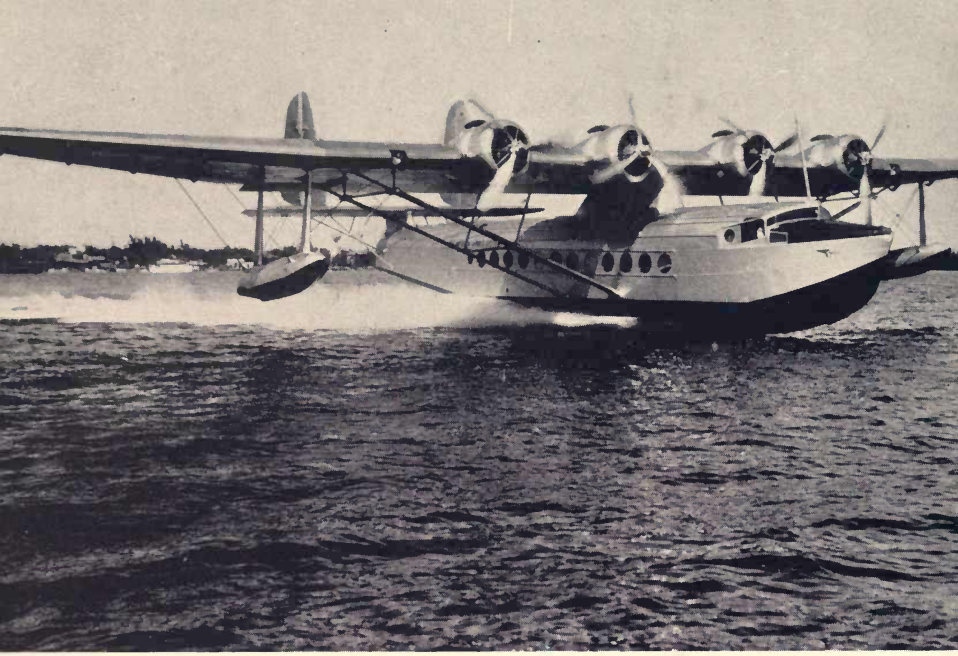
Polo Game

Miami Beach Salt Water Pool



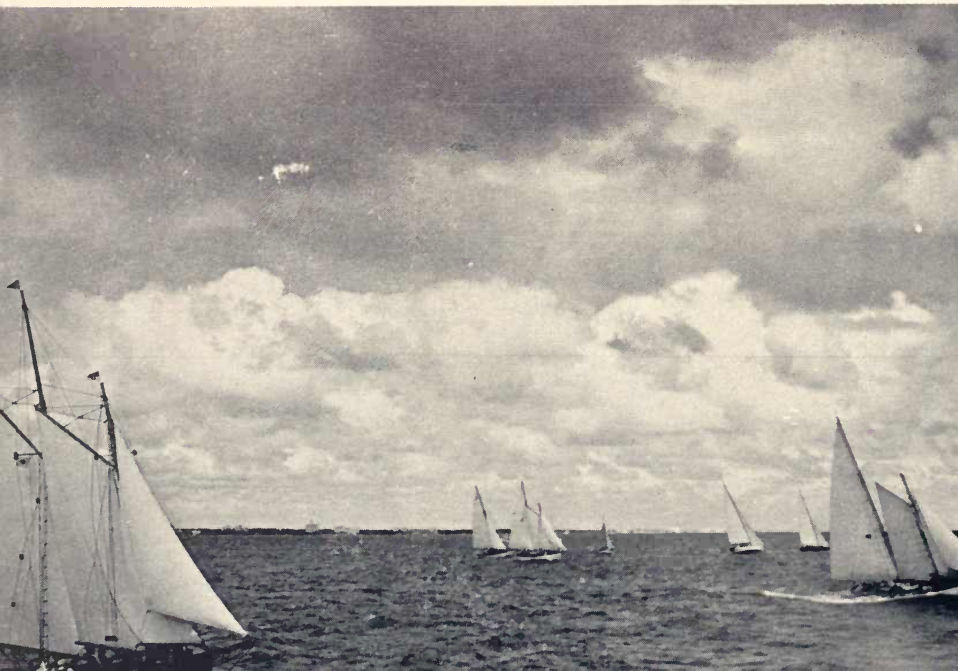
Ready for a Race . . . Greyhound Track

Aquaplaning with a Seaplane



"Flying Down to Rio"

Yacht Racing



In September, 1925, the railroads and the steamship companies serving the Miami area were so swamped with business that they placed an embargo on freight shipments. Luckily this did not affect paper, but at one time, 52 carloads of paper was tied up in Baltimore and Philadelphia and had to be brought to Miami in single consignments.

The Miami *Herald* remained in the hand of Stoneman and Shutts for 26 years. In 1937 it was sold to John S. Knight of Ohio.

Florida's *Deutsches Echo,* a five-column newspaper printed in German at irregular intervals was founded in February, 1926, by A. W. Partak, its present editor. It circulates in Florida, Cuba, and a number of Northern cities. News coverage includes items of local interest as well as news dealing with the activities of German-American organizations. Some articles appear in English. Its editorial policy as expressed in the issue of November 4, 1938: "Printed in the German language, Florida's *Deutsches Echo* is an American paper true to American democratic ideals. It is strongly opposed to fascism, nazi-ism, communism, but pledges allegiance to the flag of the United States and all for which this glorious flag stands: "LIBERTY AND JUSTICE FOR ALL."

The Miami *Times,* a colored weekly, established September 1, 1923, is a five-column paper devoted to the interests of the Negroes in the community. It is conservative in tone, liberal in character, and circulates in Fort Lauderdale, Miami, Key West, and the Bahamas.

The *Jewish Floridian,* published each Friday in the Miami *Daily News* Tower, covers news items of Jewish activities throughout the State and interprets international events of interest to its readers.

The Miami *Citizen,* formerly the Miami *News* and later, the Miami *Central News,* founded April 8, 1919, is the official organ of the Miami Central Labor Union. It is a nonpartisan weekly concerned chiefly with local and national labor problems with a circulation of more than six thousand. The Miami *Review,* published week days is a chronicle of local events.

Among the defunct newspapers are the *Daily Tribune,* and the *Illustrated Daily Tab,* the latter an aggressive tabloid publication founded in the boom period by Cornelius Vanderbilt, Jr. Both were of interest chiefly because of their brief but turbulent existence.

Vanderbilt's spectacular entry into Miami's journalistic turmoil was even less successful. He arrived at the *Herald* office one October night in 1924 when the staff was working by candlelight after a torrential rain had short-circuited power lines. His announcement that he and Barron G. Collier, owner of nearly 2 million acres of Everglades land, were considering the construction of a railroad from Fort

Myers to Miami, won him much publicity and the interest of the Chamber of Commerce.

A month later, he announced his intention of starting a newspaper and advertised a prize of $1,000 for a name. In the meantime he secured financial backing for his paper, the *Illustrated Daily Tab,* which began publication in January 1925 with a front page picture of Mrs. Floris Lambert, whose name for the publication won first prize. The local advisory board contained the names of many influential Miami citizens while the late Alfred I. duPont headed the national advisory board of Vanderbilt Newspapers, Inc.

The *Tab* was successful while the real estate market was active but with the collapse of the boom in 1926 publication was discontinued.

N. B. T. Roney, who sold 6 million dollars worth of lots from one subdivision in a 6-hour sale during the boom days, was financially interested in the Miami *Tribune,* published by Frank T. Fildes which started in 1924. It was a mild, conservative daily, avoiding strife and contention. Like other newspapers, it prospered through the fat years, dwindled to tabloid size in 1926, shrank to a weekly in February 1927, and ceased publication the following autumn.

Notable because of its political activities, the Miami *Beach Tribune* began publication in 1933. It was acquired soon afterward by M. L. Annenberg, later owner of the Philadelphia *Inquirer,* who renamed it the *Daily Tribune.* Under the editorship of the late Paul G. Jeans, its daily circulation leaped to fifty thousand. Tabloid in form and character, aggressive to the extent of ridicule and abuse, it opened an attack on the municipal administration, and successfully supported a group of candidates for public office. Soon after the election its assets were purchased by the Miami *Herald* and publication was discontinued December 1, 1937.

The Coral Gables *Riviera,* a weekly community newspaper, was established in January 1926 with John D. Montgomery as editor and publisher. In November 1929, Montgomery issued the weekly Miami Beach *Tropics* at Miami Beach. Later it became a semiweekly publication.

Miami still has its blatant tavern tabloids, also trade and tourist journals. Most of these are weeklies; a few monthlies. Some appear only during the winter months. All local papers, from the dailies to the four-page "scandal" sheets, play a part in the community's life.

RADIO

In the days of "cats' whiskers" and crystal radio sets, F. W. Borton began experimenting with transmitting apparatus in a

cramped corner of a Miami battery and electrical shop. He applied for and received a license to operate a 50-watt broadcasting station, WFAW, in February, 1921. The equipment, most of the parts hand-made, was assembled on a desk-top and power was supplied by the battery shop which charged its expense to advertising.

This first radio station, the oldest in south Florida, soon found itself at a loss for program material. The Miami *Metropolis* aided Borton until 1922. In the same year the station's call letters were changed to WQAM, and its first programs included concerts by Pryor's Band and meetings of William Jennings Bryan's Bible Class, both featured events at Bayfront Park.

Realty companies, eager for publicity, were quick to sense the value of radio advertising and their patronage led to better equipment and a more powerful station. The Department of Commerce granted permission for the station to broadcast on 250 watts, which in 1926 was increased to 500 watts, and to 1,000 watts in 1928, when it joined the network of the Columbia Broadcasting System.

WQAM, now controlled by the Miami Broadcasting Company, was the first station in the United States to establish a permanent remote pick-up from the Weather Bureau. The station is serviced by the United Press, Trans-Radio Press, and the Press-Radio Bureau. Offices and studios are located in the Postal Building.

Radio station WIOD, meaning, "Wonderful Isle of Dreams," was established at Miami Beach in 1926. It joined the National Broadcasting Company in 1929 and in 1935 was purchased by the Miami *Daily News*. W4XB, a 5,000-watt short-wave station, operated in connection with WIOD, employs a Spanish interpreter.

A new antenna system erected in 1936, increased the range of the 1,000-watt station and improved the quality and range of reception. Its range was again augmented to include areas in the northern part of the State when, in October 1937, WIOD changed its wavelength from 1300 to 610 kilocycles.

The newest radio station in the Miami area, WKAT, presented its initial program on November 1, 1937. Operating on both 100 watts and 250 watts the station is housed in its own building at Miami Beach. This independent station, owned and operated by A. Frank Katzentine of Miami Beach, receives 18-hour United Press teletype news service.

The Tropical Radio Station in Opa Locka, built in 1925, houses equipment of the Tropical Radio Telegraph and the American Telephone and Telegraph Companies. The former, affiliated with the United Fruit Company, provides telegraph and point-to-point communication between operatives of the United Fruit Company, but its facilities are available for ship and yacht owners. The equipment of

the American Telephone and Telegraph Company, which includes six channels, is designed for point-to-point telephone conversations between the two American continents. Its facilities also provide direct telephone communication between points in South America and trans-Atlantic steamers or cities in Europe.

ARCHITECTURE

LITTLE of Miami's architecture is old. There are no "early" buildings, and only a few that have a definite historical interest. The first structure of note erected in this area was the Cape Florida Light on Biscayne Key opposite Coconut Grove, built in 1826 on the site of an old Indian mound. The original stone and wood tower was partially destroyed by fire during an Indian attack in 1836.

Ten years later an 85-foot brick tower rose from the same site, the height increased to 120 feet in 1849. The upper part of the light was destroyed by gunfire in 1862. Upon its restoration a few years later, light service was resumed and continued until 1878 when the newly designed Fowey Rock Light out on the reef and nearer the ship lane, replaced it as an aid to navigation. Cape Florida Light was used by the United States Signal Corps as a station during the Spanish-American War.

Of historic Fort Dallas, which originally stood near the mouth of the Miami River, nothing now remains except the one-story barracks constructed of native stone. No outstanding building was erected in the Miami area until Henry M. Flagler built the large frame Royal Palm Hotel in 1896. In the maze of hotels completed during and since the boom, there is more of "Main Street" than architectural beauty. The one structure of unusual design, the rambling, many-turreted Halcyon Hotel, once known as the White Palace, was demolished to make way for the Alfred I. DuPont building, a streamlined skyscraper completed in 1939.

The frame buildings that lined the streets of the frontier Miami are fast disappearing. They were replaced, first by brick structures with porch roofs extending over the sidewalks and later by the steel-and-concrete towers of today and even these, in many instances, have been remodeled in accordance with the prevailing mode in modern shop fronts. In nearby neighborhoods where garages, beer stands and foreign grocery stores are crowded in among the rooming houses, many of these old frame houses still stand, slowly rotting behind a high "store-front" that partly conceals them.

The style of these first residences differed according to the means and tastes of the owner. In general, the remaining frame houses differ little from those still found in northern cities. In the twenties, however, a new fashion came into being—one that, for want of a better name, has been called the modified Mediterranean. This archi-

tectural style found expression in thousands of concrete block and frame stucco bungalows that sprang up during the boom. They have color without flamboyancy and a softness of outline that harmonizes with the tropical foliage which has grown up about them. Seasoned by more than a decade of tropical weather, their original blues, browns, and yellows are less dazzling than the glaring white stucco finish on the new houses that are being built today.

These new houses mark a third change in type and design. Influenced by the modern trends in building, partially determined by expediency, local conditions, and building laws, a new style, sometimes designated as Floridian, has been evolved.

Successive hurricanes destroyed most of the "jerry-built" structures erected during the boom days. Flimsy wooden houses and concrete block buildings unsupported by reinforced pillars or lintels have proved to be unsafe in areas subject to these violent storms. While these matters have been taken care of by a municipal building code, there are other distinctions which characterize this newer style.

The overhanging eaves of the frame houses and the flat roof of the "modified Mediterranean" have almost disappeared. The modern roof, whether tiled or shingled, has sufficient pitch to shed water rapidly and ends abruptly, at the outside wall. There are no projecting surfaces exposed to the fury of winds.

The severity, the stark outlines of these newer homes, especially in the predominating lower and middle priced class, is relieved only by proper arrangement of shrubs and vines. The modernistic trend is even more marked in the higher priced homes where beauty in line and color has been replaced by originality in distribution of mass.

Miami did not take its architecture seriously until 1916 when the late James Deering completed his estate, "Viscaya," at Coconut Grove. This magnificent estate, a truly palatial private residence built on 300 acres of formally landscaped grounds and gardens, is an example of Italian design with decorations and art work dating from the twelfth century.

The name "Viscaya" comes from the model of a Spanish ship, the *Caravel Viscaya,* a miniature replica of which serves as a crest surmounting the entrance gates. The gates themselves, the gardens, terraces, and the great house are principally Italian in spirit but influences from all over the world lurk among the treasures gathered here on the shores of what the Spanish explorers called the "Laguna di Miami."

Along the main avenue before the house are sacred Bo trees of India, favorite of the ancient Buddha. Further on are Chinese goldfish bowls of the Ming dynasty. In the palace itself are Egyptian vases sculptured soon after Napoleon's African campaign; a silver

toilet set by Buntzell of Vienna; a German wood-carved figure of Saint Sebastian; Ferrarese tapestries, once the property of the poet Robert Browning; and hundreds of paintings, statues, and other works of art. Practically every country is represented but Italian art and background predominate.

In 1934 Viscaya was opened to the public. Guides conducted parties through the house and grounds and an admission fee was charged. Since the hurricane of 1935, which did much damage to the property, the estate has remained closed. A staff of servants is retained to keep this $15,000,000 estate in order.

Another attempt to catch the spirit of a foreign architecture is seen in the town of Opa Locka close on the vast reaches of the Everglades. The domes, minarets, and balconies of Turkish mosques loom against the sky like an Arabian Night's fantasy. A church building reflects the structure of an ancient Egyptian tomb. The streets bear Iranian names. This was one of the many towns that sprang up with the boom.

Another boom town was Miami Springs. Here, in 1925, was opened the new Hotel Country Club, with 40 guest room suites, announced as a "most distinctive addition to the architecture of Southern Florida." Now a sanitarium surrounded by palms and tropical shrubbery, it is still unique among the boom-time inspirations. The building rises three stories in a series of terraced floors connected with ladders suggesting a pueblo Indian village. Above it all rises a tower that belongs to no particular style unless it be that of the Spanish-Moor.

More typical of the Moorish influences are the News Tower and the Miami Biltmore Hotel both erected during the middle twenties. The towers of both these buildings are reproductions of the Giralda Tower of Seville but the introduction of extra windows was a result of modern needs.

Along Northwest North River Drive, opposite Fort Dallas stands the Scottish Rite Temple, another example of imported architecture. Imposing and coldly aloof, this building, carrying a burden of oriental symbolism, frowns down on the restored historic Fort Dallas and the sluggish river crowded with boats and odorous fish houses.

Of the churches in the Miami area, most noteworthy are the First Congregational of Coral Gables, patterned after a Spanish mission, and St. Patrick's Catholic Church at Miami Beach, a colorful, brick structure in the Romanesque style. The First Church of Christ Scientist on Biscayne Boulevard is an excellent example of the simplicity and purity of ancient Greek architecture.

A distinctive example of modern design is the Pan-American

Airport at Coconut Grove, standing on a point of land at Dinner Key, surrounded on three sides by water.

Franklin D. Roosevelt's Holland Dutch ancestors' coat of arms is displayed upon a large stone shield above the entrance to the Roosevelt Hotel. The shield depicts three roses upon which appears the motto, "Qui Plantivit Currant." A ghost hotel of massive proportions, the Roosevelt stands sentinel at the western end of the County Causeway. A product of the boom days, it still remains an empty shell.

Extravagances and prodigality at Miami Beach did not cease with the collapse of the boom. Residences on the beach are interesting for detail, color, and style that appears to be evolving from climate and geographical position. Particularly noticeable are the Arabic latticed balconies, fine hand-wrought iron grilles, columns topped with stone urns and urn-topped arches resembling European wayside shrines, and expansive rows of white and polychrome tiles. There are hundreds of tiny "estates" whose owners have sought either exclusiveness or solitude behind walls—walls, not quite high enough to hide the vivid coloring and daring architectural experiments. But out of it all has come, of necessity, an integral style, chiefly Spanish, but very freely treated. The whole effect is gay, cheerful, and exotic.

SPORTS AND RECREATION

BECAUSE of its moderate climate and natural physical advantages Miami became known from its beginning as a pleasant place in which to live. As the city grew, its leaders combined to provide recreational facilities that might appeal to people of all ages and tastes, whether in search of health, relaxation, or a holiday of strenuous excitement. In addition to facilities provided by nature —surf bathing, fishing, and hunting—nearly every form of recreation, even ice-skating, has been so developed that the name Miami has become a synonym for play. This means that Miamians and their guests may elect to be spectators at formal events, or if they choose, actively participate in games, contests, or other forms of amusement.

Public parks and playgrounds are designed to provide diversified pleasure for winter visitors. Bayfront Park, and Miami Lummus Park, are convenient to the downtown area. Numerous neighborhood parks make adequate provisions for diamond ball, baseball, football, and tennis. The annual Miami Relay Olympics, participated in by many Florida high school athletes, are held at Moore Park. During the contests a miniature Olympic village is constructed to house the contestants. Among the featured football games staged in the Roddey Burdine Stadium is the Orange Bowl game played each New Year's Day.

Besides the recreational activities offered in Miami's parks there are those of a more sedentary nature. The Civic Center at 35 North West Second Street is a favorite meeting place for the social minded. Groups of visitors from each state are organized into state societies or clubs and dances and card parties are a major pastime.

One of the special programs held at the Civic Center is the flower show. Miniature model gardens, art and butterfly collections, tropical wood oddities, flowers from foreign lands, and rare and exotic orchids including the finest collections ever displayed in the South, all combine to make this one of the most colorful events of the season.

Another widely attended event is the annual All-American Air Meet held at the Municipal Airport, usually during December. Ordinarily a pageant precedes the formal opening and, every afternoon, bands and drill units of various organizations give perform-

ances between the scheduled events. Each day's activities are concluded by Army and Navy dances and other entertainment for officials and visitors who are in Miami during the maneuvers.

These are but a few of a long calendar of events sponsored by the city in an effort to make this area the finest playground and pleasure resort in the world. To accomplish this aim Miami offers a wide and varied entertainment program that is supplemented by a list of spectacular events staged by private corporations. Investments and expenditures devoted to sports and recreation total more than 45 million dollars annually.

Topping the list of lavish display and expenditures is horse racing. Two fine tracks draw an average daily crowd of nearly 10,000 spectators during the 96-day racing season and every day these fans toss more than $350,000 into the pari-mutuel betting pool.

Every afternoon throughout the season, long lines of automobiles converge in a veritable sea of cars at the race track parking grounds. The stands and clubhouse fill with gay excited patrons who seem never to tire of the sport. Perhaps it is the banks of tropical flowers that attract them. It may be the wide lawns, the fleecy clouds above the palms, or the exotic water birds.

The subdued chatter of the crowd rises sharply as the thoroughbreds come out on the track for the first race. As the horses, led by a red-coated steward, parade before the stands, the people begin to mill. Long lines form before the betting windows. Here and there an old hand calmly studies the field through his binoculars and notes the betting odds on the "tote" board across the track. As the horses gather at the post the great crowd becomes quiet. They are almost silent as the line-up takes definite form.

Then a roar goes up as the horses leave the barrier. The clamoring bell that marks the official start can scarcely be heard above the excited cries of the multitude. In the press box, veteran observers follow the horses through field glasses, reporting their respective positions at each pole.

And as the shadows lengthen across the park and less ardent fans begin to drift toward their cars, the strident, high-pitched voice of some bettor still rises above the voice of the cheering multitude as he "hollers his horse home" in the last race. The day is over. Cars stream from the parking lots toward the town as their occupants discuss the events of the day. Some have won; some have lost; but they all come back, hoping to make a "killing."

At night, man's other favorite, the dog, takes the center of

the stage. The scene shifts to the various kennel clubs where powerful flood lights illuminate every corner of the tracks and throw into sharp relief the lean muscled greyhounds and the fleeting mechanical rabbit. The same gay crowds, always ready to chance another dollar, fill the stands and stream out over the promenades and terraces.

Above the din of music and the surge of voices, a bugle sounds and the ceremonies begin. Elaborately uniformed attendants parade the dogs before the throng, pause a moment before the judges' stand for a last minute inspection of the racers and then file smartly away to the starting boxes. There is a hush, the sound of the mechanical rabbit speeding along the electric rail, and the swelling thunder of cheers as the gaunt hounds leap from their cages and flash into action.

Another sport, in which betting is likewise legalized, is Jai-alai (Hi-li), a Spanish game somewhat on the order of hand-ball. Jai-alai was evolved from an ancient game played by driving a ball against the wall of a village church. At first this was done with the bare hand. Later the game was played in an open court with a flat bat.

The modern game is played by opposing single or double teams on a paved court in a specially constructed building called a fronton. The ball is served against an end wall and, as in tennis, must rebound into marked areas within the court. Each player wears a gauntlet from which projects a long, curved, basket-like implement known as the "cesta." The player catches the ball in the cesta and, in the same uninterrupted motion, hurls it back into play.

The players, usually Cubans, are skilled through years of practice and play with incredible speed. Spectators in the stands are protected by a floor-to-ceiling screen on the open side of the court. As the score varies during the game so do the betting odds fluctuate from moment to moment. Between games, music for dancing is furnished by a Spanish or Cuban orchestra.

Another widely patronized sport in the Miami area is golf. Eleven courses are maintained for the convenience of those who find 12 months of practice each year none too many for the good of their game. The skill of the world's greatest golfers is tested on Miami's courses. Jones, Hagen, Sarazen, Runyan, Dutra, Smith and other nationally known players have been featured in Miami tournaments. Nearly all the golf courses in the area are available to tourists.

A quieter form of recreation, though no less gay, is found in

the night life of Miami's many clubs and bars. Famed bands, stars of screen, stage, and radio, expensive appointments and extravagances in tune with the prodigality of the tropics, all contribute to the merrymaking. For the more romantic are the outdoor dances on shining terrazza floors with muted music and soft lights aloft in the restless palms.

FISHING

FROM the time white men replaced the Indian in south Florida, fishing has been an important occupation. At first it was purely an individual enterprise, a means of securing food for the family larder. Later, fishing became a commercialized industry and then a recognized sport.

As sport it ranks among the most popular, and is suited to every pocketbook. The bamboo pole fisherman reaps as much pleasure and satisfaction from landing a black bass from the Tamiami Canal as does the Gulf Stream angler who wins a battle with a sailfish from the cockpit of an expensive cabin cruiser.

The philosophy of Izaak Walton is fostered in Miami by the Rod and Reel Club which has a limited membership of four hundred plus a long waiting list. The club includes men from many walks of life, every one of them versed in the time-honored recreation of angling.

The tourist has a wide latitude in his choice of fishing opportunities. He can acquire an outfit, including bait, for less than a dollar, and fish from any of a dozen bridges, bulkheads, or piers. From this modest start there is practically no limit upward. Some comparatively simple kits, especially those designed for deep-sea fishing, cost as much as a medium priced car.

Deep-sea fishing, however, may be enjoyed without the expense of a permanent investment in equipment. On charter boats, available at a wide variety of prices, a day's sport costs as little as two dollars with everything furnished except lunch and liquid refreshments. Charter cabin cruisers making the Gulf Stream are owned and operated by captains who hold certificates and licenses, and are expert guides and seamen. During the years the fleet has been operating, not a life has been lost at sea. The captain advises and helps the beginner catch whatever fish may be running.

At Baker's Haulover, about ten miles north of Miami, the tide on ebb or flow is a mill race, spanned by a high bridge. From the bridge and a concrete jetty extending into the ocean, fishermen have made excellent records. Fishing is free but transportation must be arranged since there is no public conveyance. Bait can be purchased at a tackle shop. A restaurant features fish and local delicacies.

The 1,000-foot pier at Sunny Isles, just north of Baker's Haulover, affords an opportunity for deep-sea fishing without a boat.

Tackle and bait can be secured at the pier. Visitors who do not care to fish are admitted for 15 cents; otherwise the charge is 40 cents. The clubhouse and casino provide an excellent menu.

Along the ocean shore from Miami northward, surf fishing is to be had by day or night when the tide is favorable. The catch is usually limited to such swift surface fish as blue runners, bluefish, mackerel, and pompano.

Bridges connecting the keys 50 to 75 miles south of Miami are outlying fishing grounds. From these spans, anglers catch almost all kinds of fish that frequent the inland waters. Tackle, bait, and refreshments are sold at nearby-by stands.

Of the many varieties of fish to be found in Florida waters only a few are known as gamefish and therefore entitled to consideration by the sportsman. Of these, none is more popular than the sailfish, named from the purplish-blue, web-like dorsal fin that extends from its head almost to its tail. This fin, sometimes 2 feet high can be folded at will into a deep, narrow groove along the top of its back.

The popularity of the sailfish lies in its elusiveness, its fighting qualities, and the thrills and excitement experienced in bringing one to gaff. The upper portion of its head, over the lower jaw, projects forward to form a beak or spear with which the sailfish usually taps the lure before striking. Sometimes, its great sail proudly displayed, a sailfish may follow the trolled bait for miles, but aggravatingly refuse to come near it. Extreme patience is needed at first, and, when the fish takes the bait, expert skill. Its weight varies from 35 to 50 pounds.

Next to the sailfish, many anglers who like the "big ones," prefer the tarpon that range from sixty to two hundred pounds. One weighing 352 pounds was landed by a commercial fisherman near Indian River Inlet in 1912.

The tarpon, or Silver King, is a massive fish, with a heavy head and a bulky body. But it is also possessed of great strength and endurance and, when hooked, never fails to put up a long and fierce struggle for freedom. Landing a tarpon involves a contest against brute strength. Its aerial gymnastics and desperate lunges last long enough to try the muscles and skill of any fisherman.

In midwinter the tarpon are usually found about the coasts and inlets of Central America. They migrate in spring, traveling northward in great schools, loafing in the Caribbean until March. They then move into waters around the Florida Keys and by midsummer may be found along the entire east coast and coastal waters of the Gulf. During the spring and summer months they are par-

ticularly plentiful in the inner channels among the thousands of little islands clustered about the southern tip of the penisula.

Another great game fish, whose tough, wiry fighting qualities have been likened to those of a bucking bronco, is the marlin. These are the superlatives in the rod and reel class. World records include one weighing 1,040 pounds caught by Zane Grey, off Vairoa, Tahiti.

Marlin are known as blue, black, silver, striped, or white according as their hide is marked. Along the east coast the white marlin, averaging one hundred pounds in weight, are more common while the blue marlin, running from two to six hundred pounds are found on the eastern edge of the Gulf Stream in the vicinity of Bimini.

Marlin reach such great size and are such terrific fighters that tackle must be made to order. A great reel costing six hundred dollars and up, big enough to hold almost a mile of heavy line is the first essential. Two hundred fifty yards of 18-thread line answers for the average game fish but the minimum requirement for blue marlin is nine hundred yards of 36- to 54-thread line. Some sportsmen use up to forty-five hundred feet of line while others, depending on sheer strength, use heavier 72-thread lines. To manipulate such tackle it is necessary for the angler to wear a "harness," a leather vest, provided with a socket and cables to support the outfit.

In southern waters only one fish is comparable to the marlin—the tuna—a bullet-shaped parcel of chained lightning. It may take several hours to land a 150-pounder while all-day battles with larger specimens are not infrequent.

It is often difficult to land one of the larger game fish whole. Sharks swarm to the scene of battle and tear great chunks from the side and belly of the hooked and helpless marlin or tuna.

On the edges of the Gulf Stream and on shallow flats around wrecks, buoys, and piling, and inside waters, anglers are annoyed by barracuda, the "tiger of the sea." Ranging from 3 to 6 feet in length these ferocious cannibals attack anything, not alone because of hunger but from the sheer lust for blood. Even the shark cannot equal them in speed, cruelty, or blind reckless courage. Moise N. Kaplan, authority on Florida game fish, relates that an irate angler carved up a barracuda and tossed it back into the water. He baited his hook with the flesh thus obtained and a minute later, this barracuda fiercely struck and was caught again on the bait from its own body.

The foregoing are the large fish of the Miami area, although, strictly speaking, the shark and barracuda are considered as troublemakers rather than game fish. Among the smaller game fish are the

amberjack, bonito, channel bass, grouper, kingfish, mackerel, snook, bonefish, and wahoo. The latter is a member of the mackerel family found in tropical waters about Florida and the West Indies. It is a terrific fighter, good eating, but not plentiful. The bonefish weighing from two to five pounds, are among the smallest of the game fish and only the lightest tackle is used for taking them. The attraction lies in the knowledge, finesse, and skill the sportman must develop in landing them.

On an incoming tide, bonefish are sometimes seen in quiet, shallow water on banks or bottoms, their tails up, as they "root" for food in the sand or mud. Locating these feeding places is difficult and often requires time. In addition, the bonefisherman must have the patience of Job. A ripple on the waters, a fleeting shadow, or a mere whisper is often sufficient to frighten away the timid creatures.

Miami's fishing opportunities are not limited wholly to salt water. The canal and its branches along the Tamiami Trail have an abundance of small tarpon, redfish, snook, bream, and black bass, the latter probably America's sportiest fresh-water fish. So great an asset is this fish to Florida's outdoor life, that the State legislature in 1935 passed an act making illegal the sale of black bass or its transportation for sale out of the State.

Along the Tamiami Trail, black bass are taken by bait or fly casting and by still fishing. The gear is simple and inexpensive. A 4½- to 6-foot steel rod, a cane pole or a fly rod, used with a 16- to 18-pound test line are all used successfully. Natural bait, live minnows, frogs, worms, crawfish, or artificial lures, spoons and spinners, are all employed. When the sky is overcast and the fish refuse surface lures, underwater pork-rind lures may be effective. The fly fisherman finds that bass lures often get the fish. When casting, plugs should be reeled in slowly and halted frequently to simulate a wounded minnow attempting to escape an enemy.

For fresh-water fishing a license secured from the office of the county judge, is required. A non-resident fresh-water permit costs $1.75. The bag is limited to 12; possession to two days' limit.

Commercial fishing fleets operated in conjunction with local fish markets together with boats operated by individual owners put out to sea in the early morning hours each day to return with food fish for local consumption and northern markets. During the kingfish season, from November to March, approximately two hundred boats sail into Biscayne Bay and out through Baker's Haulover and the Government Cut, and thousands of pounds of mackerel and kingfish are brought in each evening.

The season for Florida lobster or crawfish and the stone crab, a rare delicacy little known north of Miami, is from July to January. Many local fishermen, from Pompano to Homestead, use homemade traps for lobster fishing. Crawfish, brought in from the Bahamas the entire year, are iced and shipped to northern cities.

The Annual Metropolitan Miami Fishing Tournament, sponsored by all the communities in the Greater Miami area, is held from January to April. Contestants averaging 1,250 daily from all the states and many foreign countries participate in this tournament each year. Daily certificates of award are provided for each of the 99 days of fishing. Prizes totaling $10,000 are offered for 27 varieties of fish and the tournament includes such special features as the picturesque parade of the fishing flotilla and ladies' day for which separate prizes are provided. Weekly prizes are awarded to charter-boat captains participating in the tournament. Entries for prizes are measured and weighed and recorded on blanks provided by the committee which has its headquarters in the Rod and Reel Club on Hibiscus Island.

Many anglers have their prize catches mounted for display in their homes or clubs. The charges range from $10 to $20 per foot for the larger kind such as sailfish, marlin, tarpon, dolphin, or barracuda. For smaller fish, like the brilliantly colored parrot or angelfish, the cost is from $10 to $20 depending on the amount of coloring required.

Measured in terms of money, fishing ranks high in Miami's list of recreations. It is estimated that in more than one hundred days of fishing, $500,000 is expended for boat hire alone, a computation based on a charge of $25 per boat day for two hundred craft. Tackle dealers agree that about one million dollars is paid yearly for equipment and supplies.

In the interests of the sport and conservation of fish, the true angler and sportsman returns to the water such fish as he does not intend to have mounted, enter for tournament prizes, or use for food.

THE GULF STREAM

THE Gulf Stream, so named by Benjamin Franklin, was formerly listed as the "Florida Stream" on charts of the coast of Florida, prepared in 1771 by William Gerard de Brahm, British Surveyor General for the Southern District of North America.

Easily recognized by its higher temperature and indigo blue color, the Gulf Stream pours through the Florida Straits, sweeps close along the coast as far as Palm Beach, then takes a northeastward course. It is deflected eastward from the Newfoundland Banks, and branches in mid-ocean. There, part of it turns southward toward the Azores, eventually encountering the trade winds which, on both sides of the equator, induce currents on the ocean's surface. These currents are called respectively the North and South Equatorial Currents.

Any perceptible continuous horizontal movement in a body of water is called a current. In channels and estuaries near the coast, currents are caused chiefly by tides, but in the open sea they are due primarily to winds. A continuous wind blowing over a wide expanse of water induces motion on its surface. This surface motion, because of the viscosity of water, is transmitted, in part, to the water beneath. If these winds are not interrupted the entire body of water, to a greater or lesser depth is set in motion. The equatorial currents rise from such a natural cause.

Between latitudes about 30° N. and 10° N. in the Northern Hemisphere, the trade winds of the Atlantic blow with great regularity from the northeast. In the Southern Hemisphere the trades blow from the southeast to a point north of the equator. Thus, these trade winds create two great currents which converge near the equator and flow westward in one gigantic stream.

Some of the waters of the South Equatorial current, at about 20° W. pass north of the equator and are divided by the projecting point of Brazil. While a small part flows southward, the main body is compelled by the contour of the coast, to take a northwesterly course and finally enters the Caribbean Sea through the Lesser Antilles.

The North Equatorial Current is likewise divided. The greater part pushes into the Caribbean to join the waters of the South

Equatorial; the other part, split on the islands, moves to the northwest along the Bahamas and is called the Antilles Current.

This great mass of water pouring into the Caribbean raises its level above that of the Gulf of Mexico. In consequence a current with a velocity of 60 to 100 miles per day, one of the strongest on record, passes through the Channel of Yucatan. As a result, the level of the Gulf of Mexico is raised above that of the Atlantic, and these waters, forced through the Straits of Florida, enter the Atlantic as the celebrated Gulf Stream.

Direct leveling across the Florida Peninsula shows that the elevation of the Gulf over the Atlantic approximates 0.7 feet, which, calculation has shown, is required to give the current of the Gulf Stream its present velocity.

After passing between Fowey Rocks and Little Bahama Bank it continues in a northeastward course, following the general direction of the 100 fathom curve, a more or less distinct line, closely paralleling the shore line, where the water reaches a depth of 100 fathoms or 600 feet. This curve, from Miami to Fort Pierce, is about four or five miles off the coast, and gradually bears away. At Jacksonville it is about 85 miles east of the shore line. As the Gulf Stream follows this curve it broadens out, fan-wise, its velocity slowly diminishing.

In the Straits of Florida the stream is about 42 miles wide and has a mean surface velocity of about 4 miles per hour on its axis. It broadens to a width of about 200 miles at its junction with the Antilles Current, that portion of the North Equatorial Current which flows northwestward along the Bahamas. North of this point its velocity diminishes to about one mile per hour.

In moderate weather the edges of the stream are marked by ripples; in cool weather the evaporation, due to the difference in temperatures between the air and water, is apparent to the eye. The stream carries with it a quantity of weed known as "gulfweed," familiar to all who navigate its waters.

Gulfweed, so named from its abundance in long, yellow lines in the Gulf Stream, is a genus (*Sargassum*) of seaweeds of the family *Fucaceae*. The North Atlantic species (*S. bacciferum*) takes its name from the berry-like appearance of its air vessels. These seaweeds are likewise found in all warm coastal waters, and are easily detached from the stones to which they cling. The stems, widely known in South America as goitre-sticks, are often employed for the cure of goitre. It is eaten in China and used in salads and as a pickle in other parts of the East.

The sweeping, circular currents of the North Atlantic Ocean form a vast eddy which gathers this weed into its vortex in such quantities that early navigators thought it hindered the progress of their ships. Discovered and named the Mar de Sargaco, by Columbus on his first voyage it has, since then, become known as the Sargasso Sea, the locale for numerous legends and weird tales. Alive and crawling with sea life, it has been credited with the power of drawing ships and men to realms of darkness and fates fraught with unknown terrors.

TAMIAMI TRAIL

ONLY a narrow strip along the coastal line of the lower Florida peninsula was known and explored when Dade County was created. Half a century later this vast back country called the Everglades was still an untamed waste. The United States Army had combed the Big Cypress and land between the Caloosahatchee River and the lower east coast during the Seminole Wars. In April 1856, from the sketches of these reconnaissances the Secretary of War, Jefferson Davis, issued a military map of the peninsula of Florida south of Tampa Bay. For years this map remained the only existing guide to the interior.

In 1892 the Flagler and Plant railroad interests combined to make a survey across the Everglades. The party set out from Fort Myers and, working their way eastward, discarded supplies and equipment as they left the waterways of the western swamp and entered the grass-covered Everglades. Half-starved, weakened, and unkempt, they finally reached Miami, making the 150-mile journey in about three weeks. The railroads evinced no further interest in the 'Glades and they remained undisturbed for almost a quarter century.

Meanwhile, Everglades drainage became an actuality. Thousands of acres near Lake Okeechobee were drained and were producing phenomenal crops. Men foresaw the same benefits accruing to landholders in the lower Everglades.

In addition, thousands of tourists attracted to the lower west coast were obliged to return by the same route they had used to reach their objectives. Civic leaders believed that a road across the Everglades would not only prove an attraction in itself but would draw west coast visitors to Miami.

Various groups have been credited with the origin of the Tamiami Trail, foremost among them being the late Captain James F. Jaudon, of Miami, who was associated with the project from its inception to its completion. A Writers' Press Association release dated November 2, 1926, describes Jaudon as a pioneer in the development of Dade County and an expert on good roads.

The Tampa-Fort Myers road was already in existence. The idea for a road from Fort Myers to Miami originated in 1915 during a meeting of Jaudon and Francis W. Perry, president of the Fort Myers Chamber of Commerce, at Tallahassee. In that year road

building was uppermost in the public mind. The Dixie Highway Association, meeting in Chattanooga May 20, to determine the route of a proposed road from Chicago to Miami, defeated a plan to have it run through the center of Florida. The defeated faction immediately formed the Central Florida Highway Association which met at Orlando the next month and pledged support to a program that included the Fort Myers-Miami Road.

At the request of the Miami Chamber of Commerce, the Dade County Commission furnished the services of an engineer in making the preliminary survey. Later the county created the Miami Marco Road and Canal Commission consisting of Captain Jaudon, L. T. Highleyman, and R. E. McDonald, who appeared before the trustees of the Internal Improvement Fund at Tallahassee to request the creation of a special road and bridge district in order to issue bonds for the construction of the proposed Trail.

The county advertised for bids early in 1916 but none were received. The county, thereupon, made another survey of the 37½ miles of road extending to the Lee County line.

Meanwhile, newspapers in both Lee and Dade counties had endorsed the project and given it wide publicity. On July 16, 1916, Dade County floated a $275,000 bond issue and awarded a contract for the road. A paving company began the work on a sub-contract, but encountered difficulties and could not complete its contract. Although the county amended the original contract several times and issued additional bonds to provide funds, the road to the Lee County line was no more than a rough trail. Beyond that, the road was even worse, for Lee County was no more successful than Dade.

The first trouble arose from advancing labor costs brought on by the World War. The greatest problems, however, were of an engineering nature. Originally the contractors attempted to lay a rock fill directly over the Everglades muck to make the roadbed. This did not remain usable and gradually disappeared into the mud.

It became apparent that the muck would have to be removed and a bed built up from the underlying rock formation. This required a dredge, a canal in which to float it, and plenty of rock. The latter lay in great quantities beneath the muck and could be had by blasting which, in turn, would create the needed canal.

This expensive solution did not end the difficulties. About twelve miles out, and extending for many miles beyond, was an expansive stratum of flinty rock which required special equipment to work. Furthermore, during long dry seasons, water in the canal sank so low that the dredge was often stranded.

In 1919 it became evident that Lee County, having 121 miles

to build, would be financially unable to complete the portion of the Trail within its borders. The Chevalier Corporation, a land company organized by Jaudon in 1917, and owner of extensive acreage in Monroe County, offered to build a link in the Trail to dedicate it for public use if Lee and Dade Counties would route the Trail through the company holdings. The proposal was accepted but actual construction did not begin until 1921.

In the beginning all labor, supplies, and equipment had to be transported to the west coast and worked up the numerous creeks in that area to a location near the new route. It took so long for the engineers in charge to communicate with their home office at Miami that radio apparatus for sending and receiving messages was installed.

About this time Barron G. Collier, best known for his street-car advertising enterprise, began buying land in Lee County. In 1923, when the State legislature cut off the southern part of Lee County to create Collier County, Barron Collier owned most of its 1,267,200 acres.

Almost immediately, contention arose over the change that had been made in the route of the Trail. Sponsors of the new county clamored for the original route which would take the highway out of Monroe County and the holdings of the Chevalier Corporation, which had done considerable work on its part of the Trail.

Two years later the Tamiami Trail was made part of the State highway system and the State Road Department abandoned the Monroe County route. The Chevalier people, and Monroe and Dade Counties protested the change claiming that the corporation was faithfully performing its part of a formal contract. The State at last accepted the road as the "South Loop" and on an official road map of Florida, published 1936, it appears as State Highway No. 27. On other road maps, this section of the road is marked "closed."

Under State control, work progressed rapidly. The first contract issued by the State was signed August 23, 1925, and the Trail was opened to the public on April 20, 1928. The total cost, from Fort Myers to Miami, was $7,000,000.

Completed, this 30-foot highway across the Everglades represents twelve years of man-killing labor. Men worked waist-deep in snake-infested sloughs for months building a crude cypress-log roadway to support the heavy drilling machinery. More than once the treacherous mud oozed away and the iron monster disappeared into the depths of the mire.

Crews of grimy men toiled in the midst of an unbroken desolation. Every now and then the silence was broken by a roar of ex-

ploding dynamite and the sodden men rested for a moment while a geyser of black mud rose skyward, scattered, and dropped on the sawgrass that hemmed them in.

Over it all hung a peculiar blue haze and, in the summer, a gripping heat, characteristic of the inner 'Glades. Near each gang of men a sharp-eyed guard, armed with a shot gun, was posted to kill the poisonous snakes that infested the region. Farther west, in Collier County, other armed men in lookout towers, watched the convict labor used on part of the road.

One contractor declared that three M's built the Trail: men, money, and machinery. Another observer declared that the three M's might equally stand for muck, misery, and moccasins.

Today the Trail is noted, not for its greatness nor its cost, but for the fact that it has opened the once "impregnable" and still mysterious Everglades, a vast area unlike any other in the United States.

From Miami westward, the swamps become increasingly dense and the habitations correspondingly fewer. Signs of human life gradually disappear until little is left except an occasional fisherman trying his luck in the canal that borders the north side of the Trail. Farther on, wild life comes into its own. Lethargic snakes slither across the road; fish leap, silver-bright, from the sluggish water, and huge turtles, some green, some brown, lazily sun themselves on rocks just above the water's edge. A duck, surrounded by her young, drifts slowly along, her wary eyes scanning bank and sky for enemies; rarely, an alligator barks in the distance.

The number of water plants increases as the trail proceeds westward. The spiked heads of cat-tails, blue and purple flags, and yellow dog lilies are abundant. The airy, white, three-petaled blossoms of the spider lilies resemble butterflies poised for flight. Everywhere the water hyacinths rear their small, dark blue blossoms midst stiff, upright leaves, polished like green arrowheads.

Westward the Trail passes through stretches of stunted cypress, diminutive trees with whitish bark and delicate, bright-green foliage. Beneath them great, grotesque roots rise like gnarled, conical pedestals from the rank swamp grass. The landscape is that of the African veldt.

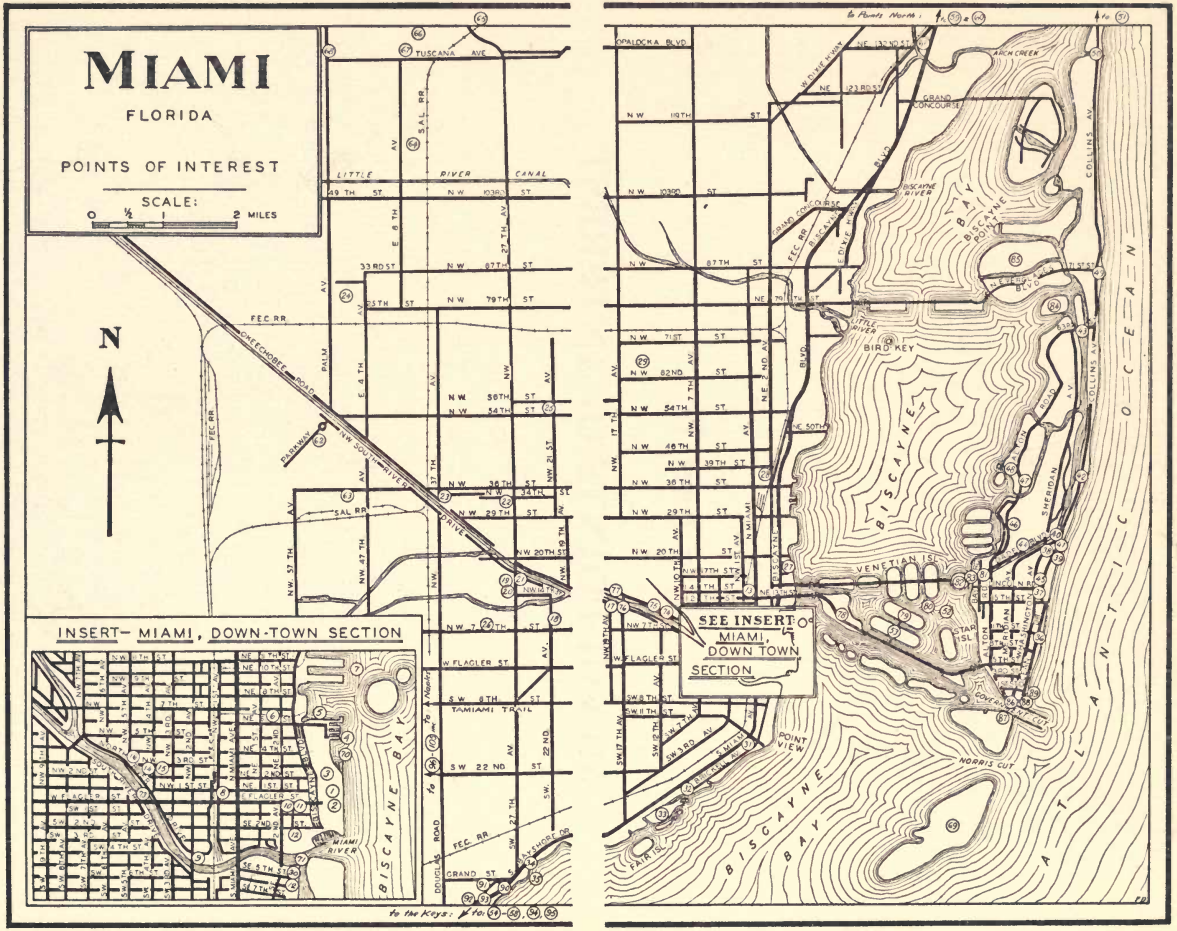
As the Trail enters the Big Cypress country, the trees are larger and burdened with dark air-plants or Tillandsias. Airy and graceful in great live oak trees in the hammocks, these air-pines appear heavy and cumbersome when attached to the sparsely branched young cypress trees. Now and then, tropical birds swoop across the high-

way. Far in the distance heron or ibis swirl like white moths above the gray skeletons of dead forest trees.

Strung across the State, close to the Trail, are six or eight Indian villages, more or less pretentious, with oddly worded signs to catch the tourist eye. As indicated by such signs as "Chestnut Billy Indian Village" or "Corey Osceola Indian Village" these camps are usually named for the head man of the camp.

Part II

MIAMI POINTS OF INTEREST


MIAMI
FLORIDA
POINTS OF INTEREST
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DOUGLAS ROAD
MIAMI RIVER
BISCAYNE BAY
OPALOCKA BLVD
ARCH CREEK
GRAND CONCOURSE
BISCAYNE POINTE
BIRD KEY
VENETIAN ISL
STAR ISL
POINT VIEW
NORRIS CUT
ATLANTIC OCEAN
To the Keys: Fig. 54-58, 94, 95

BOAT TRIPS

A DIFFERENT view and a more leisurely inspection of Miami's environs are afforded by sightseeing boat trips. In addition to those following set routes, a glass-bottom boat and several speedboats may be chartered or will take passengers who are allowed to choose their own course.

From the water the angularity of Miami's tall buildings combines with the fringed silhouette of the palms to form an unusual skyline. The landscaped estates on their flat little islands contrast with the white beaches and the undeveloped keys.

Trip 1

Virginia Key—Miami River—Millionaires' Row—Indian Village. 20 miles. Approximately 3 hours. Fare $1. Admission to village 25c. Boats leave Piers 6 and 7, City Yacht Basin, NE. 3rd St., 10 a.m. and 2 p.m. daily Dec. through Apr.; 2 p.m. only other months.

As the steamer leaves the yacht basin professional musicians play a gay tune and a lecturer begins calling attention to various points of interest.

Across the bay to the L. is VIRGINIA KEY, a barren island like the land on which Miami Beach is built. Virginia Key is the most northerly of the Florida Keys, a long chain of low, coral islands that stretch along the coast from Miami to Key West. The upper keys are for the most part impenetrable mangrove jungles; on the lower keys are lime groves. The adjacent waters are good fishing grounds.

U. S. COAST GUARD CUTTERS are usually moored at the City Yacht basin docks awaiting emergency calls.

The boat turns into Miami River; this sluggish stream, only 5.7 m. long, is navigable all the way to its source in the Everglades. Where the Seminole once poled his dugout between banks lined with luxuriant vegetation are now cluttered fish markets, unkempt houseboats, oil tanks, and partially sunken rotting hulks—a cross section of river life more interesting than pleasant to see or to smell.

On the southern shore (L) at the mouth of the river is BRICKELL POINT where the Brickell family, Miami pioneers, still live. They built their home about 1872 and maintained one of the early trading posts.

At S. E. Sixth St. is the FOGAL BOAT YARD (L) with four dry docks capable of handling craft from a rowboat to a vessel of 1,000 tons or a length of 170 ft.

Just E. of the S. W. 2nd Ave. bridge on a two and one-half acre plot, is the CITY CURB MARKET (R). Vegetables, tropical fruits and flowers, fish, poultry and produce are sold in its roofed stalls.

Opposite N. W. 1st St. from August to May is moored the ANTONDOHRN, a boat maintained by the Carnegie Institution of Washington, for scientific exploration. Each May it leaves on a three months' trip for exploration and study of marine life in the Gulf of Mexico.

On the shore (R) just E. of the N. W. 12th Ave. bridge is the OFFICE OF THE UNITED STATES CUSTOMS BORDER PATROL and the garage for storage and service of patrol automobiles.

Just W. of the N. W. 12th Ave. bridge on the north shore is the MERRILL-STEVENS PLANT (R), the largest covered drydock yacht basin in the South. Two marine railways elevate boats from the river. Eighty average-sized yachts can be accommodated for storage in this basin.

Bordering the south bank of the river above the N. W. 17th Ave. bridge are estates of some of Miami's pioneers and other prominent families. These have spacious landscaped lawns sloping down to the bulkheads at the water's edge. On the COLONEL LAWRENCE ESTATE is a banyan tree that has grown around the suspended rims of two coach wheels.

PIRATE'S COVE—COPPINGER'S TROPICAL GARDENS, (L) is just beyond (entrance from land). This inlet was once the hiding place of pirates, hence the name Pirate's Cove Indian Village, given to the Seminole camp that has occupied this place for nearly half a century. A trading post here was the first and largest in Florida, and was the home of the late chief, Jack Tiger Tail.

Trip 2

Biscayne Bay—Sunset and Surprise Lakes—Indian Creek—Isle of Normandy. 30 miles. Approximately 4 hours. Fare $1. Boats leave Pier 6, City Yacht Basin, 10 a.m. and 2 p.m. daily Dec.-Jan.; 10 a.m., 1:30 and 4 p.m. Feb.-Mch.; 2 p.m. other months.

As the boat leaves the City Yacht Basin the guide points out the MUNICIPAL STEAMSHIP DOCKS (L) where are ocean steamships of the Clyde-Mallory, Merchants and Miners, Peninsular and Occidental, Clark, Bull, and other lines.

The boat passes through the west drawbridge of the COUNTY

CAUSEWAY, to reach the north side of the bay. The causeway, approximately 3 miles in length and toll free, connects N. E. 13th. St. in Miami with 5th. St. in Miami Beach. Dock space is provided at the first bend for five large yachts. Bridges under which the specially designed low built *Nikko* sails afford access to Palm, Hibiscus and Star Islands.

PALM ISLAND and HIBISCUS ISLAND (L) on either side of this channel were both made by sediment pumped from the bay. Among the estates on Palm Island is that of Al Capone; around it dense foliage lines the inside of a high stone wall.

The route crosses a water course for boat races locally called "the speedway." It was on this course that Gar Wood, designer and driver of speedboats, competed with Captain Seagrave of England in the 1929 international races.

As the boat approaches the entrance to COLLINS CANAL (R) it circles part way around BELLE ISLE, so that passengers may glimpse its palatial homes.

Past the VENETIAN CAUSEWAY BRIDGE, the boat turns E. skirting Sunset Islands. These four islands, products of boom days, were landscaped before being put on the market in the spring in 1936. On the shores are windbreaks of tall Australian pines which obstruct a view of the islands from the water. The homes on these islands are nearly all being built on a lavish scale; many of them are designed in the ultra-modern style of architecture.

The boat continues N., turning east through the channel between La Gorce Island and Normandy Isle, (R) into Indian Creek, an artificial water course with white bulkheads, past Allison Island on the Southern end of which is St. Francis Hospital, a Catholic institution specializing in sun therapy. The buildings are in the midst of landscaped grounds that slope down to a private yacht dock.

Continuing S. on Indian Creek to 41st. St., the boat passes the home of many wealthy winter residents amid crimson hibiscus, purple bougainvillea, pink and white oleanders and graceful palms.

Retracing the route to Flamingo Waterway, the boat enters the waterway (L) proceeds through Surprise Lake to Biscayne Waterway from which it turns S. into the bay; past palatial estates, it continues through Sunset Lake which lies between Miami Beach and Sunset Islands. At the lower end of Sunset Lake the boat turns west, passes the Venetian Islands and to its pier in the City Yacht basin.

Trip 3

Government Cut and Coral Reefs. 5 miles. Approximately 3½

hours. Fare $1. Boats leave Piers 8 and 9½, City Yacht Basin, 10 a.m. and 2 p.m. daily Dec. through Apr.; other months 2 p.m.

These cruises enable passengers to see the deep sea life of the coral reefs in addition to the large estates of wealthy winter residents. Through the large plate glass are visible gaily colored species of rare tropical fish as well as the varied coral formations and fans and plumes of sea weeds that decorate the ocean's floor.

The *Comrade II* goes northeast across the bay, paralleling the County Causeway and the palatial boats anchored there, to Government Cut.

On the S. extremity of Miami Beach and N. of Government Cut (L) is the UNITED STATES GOVERNMENT RESERVATION (*not open to the public*). Here are the administration building and offices of the resident division engineer, U. S. Army. At the W. end of the grounds is a hangar housing two planes and a repair and service department. The reservation functions as a base for U.S. Engineers conducting harbor and waterway improvements.

On the south side of the cut on Fisher Island (R), is the UNITED STATES GOVERNMENT QUARANTINE STATION, where health officers board all ships arriving from foreign ports for quarantine inspection.

To the north of the jetties directly on the ocean beach at the PLANT OF THE MIAMI BEACH KENNEL CLUB (L) greyhounds are raced nightly (Jan.-April).

On and around the MILLION DOLLAR PIER (L) extending 600 ft. over the Atlantic are many games of chance and other amusements.

Between Biscayne and First Sts. on the ocean front, adjacent to the pier, is one of the oldest bath and recreation establishments on the beach. From this point N. to 15th St. the beach is planted in coconut palms; its white sands are dotted with vari-colored umbrellas and the bright costumes of the bathers.

Paralleling the beach is the municipally maintained LUMMUS PARK (*see Tour 5*), named in honor of the first mayor of Miami Beach. Sea grape trees fringe the ocean side and hedges of cropped Australian pines line the inland.

About one mile off shore the boat stops over the reefs so that the passengers may see the numerous forms of coral life, sea fan, sea plume, brain, staghose, hand, mushroom and organ pipe corals.

On the return trip, after entering the bay, the boat turns N. passing the Venetian Islands and along the palatial homes on the bayside of Miami Beach.

The *Mermaid* covers practically the same trip. Instead of go-

Municipal Docks . . . Miami

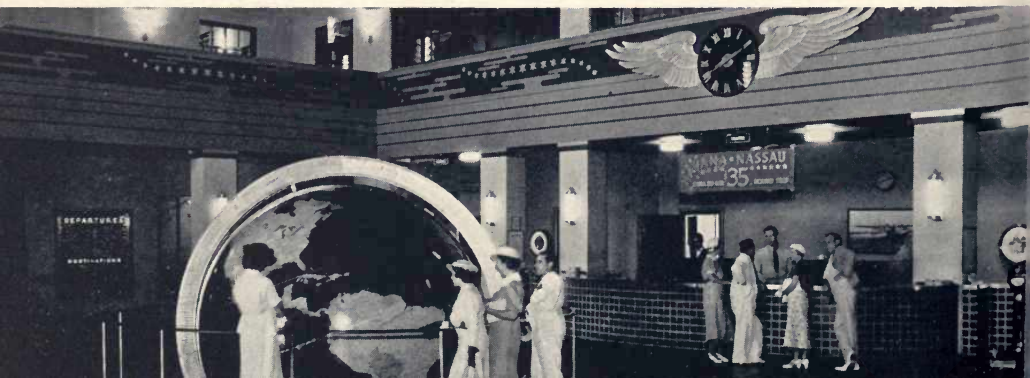
Yacht Basin . . . Miami

Prize-Winning Orchids

A Papaya Plant

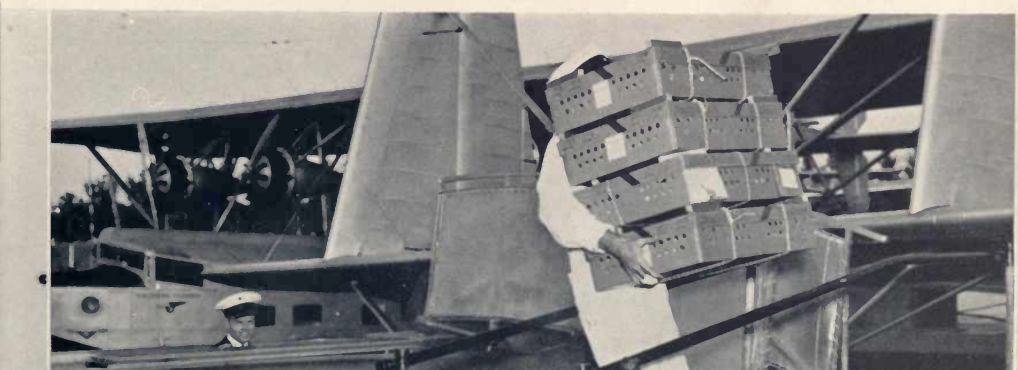
Pan American Airways' Base and U. S.

Office and Waiting Room . . . Pan American Airways



ard Station . . . Dinner Key . . . Miami

Shipping Baby Chicks by Air to South America



Dade County Tomato Field

Packing Tomatoes

Cultivating Pineapples in Miami Area

Avocados

Farmers' Market . . . Miami

Pastures Under the Palms . . . Miami Area

ing through Government Cut, the boat goes southeast across the bay and passes between Virginia and Biscayne Keys, undeveloped islands south of Miami Beach.

This boat features a diver using a deep sea helmet that weighs about 65 pounds above water, 5 pounds under water. All corals picked up by the diver are given to the passengers as souvenirs.

AIR TOURS

FROM the air, above Miami, there is a memorable view of islands, keys, bay, ocean and hinterland. Flights over Miami and Miami Beach, the ocean, and the Everglades, can be made in a slowly cruising dirigible or a speedy land plane.

Air Tour 1

Miami Beach, Biscayne Bay, and ocean shore.

THE GOODYEAR BLIMP (*operates on a 20-minute schedule during the winter season from the Dade County Causeway. Rates,* $3 *for adults;* $1.50 *for children.*)

Cruising in this dirigible at 50 miles an hour at an elevation of 1,000 feet or lower, the motion is imperceptible.

From the blimp, the man-made islands in Biscayne Bay are precise little villages set in green glass, where toy boats ride at anchor. On Miami Beach deep green hotel swimming pools are rimmed by dots of bright umbrellas. The long dark ribbon of Indian Creek cuts through the length of Miami Beach, and separates rows of doll-like houses from green golf courses where Lilliputians swing willow wands.

At the end of the Beach, sea gulls drift above the ship channel of the Government Cut on Virginia Key. The key itself is covered by typical Everglades jungle growth.

Over the ocean the blimp flies lower for a view of dark coral rock formations on the ocean floor. Game fish can be seen scurrying to shelter when the shadow of the blimp disturbs them.

Fisher's Island, the home of W. K. Vanderbilt, can be reached only by water or by air. Every detail of the estate with its beautifully landscaped grounds is visible from the windows of the blimp.

Between Fisher's Island and the mainland, the yellow, green, gray and blue of the shallow bay contrasts with the deep green of the dredged ship channel. The airship rides above these colors lazily and rises above the sky-scrapers of the Miami skyline. It skirts the edge of Bayfront Park before returning to the base on the County Causeway.

Air Tour 2

Coconut Grove, The Deering Estate, Pan American Airport, Hialeah Park, Metropolitan Miami.

A charter trip of the GOODYEAR BLIMP *of one hour, for six passengers, forenoons*—$25.00; *afternoons*—$50.00, *if scheduled one day in advance, from base on Dade County Causeway.*

This tour follows the south shore.

Past Government Cut, rounding the Vanderbilt Estate, the ship swings over Viscaya affording the only available view of the Deering Estate and its formal gardens. Then over Coconut Grove, and into a view of the Pan American seaplane base in its setting of green.

North from Coral Gables with its fluted roofs, is Hialeah Park and a sweeping view of the famous race track. The blimp drops low enough to startle the pink flamingos wading in the infield pool. East of metropolitan Miami the ship starts to descend. The dome of the court house sparkles in the sun. The hotels along the bay front begin to assume their normal proportions. The sand floor of the Causeway base arises, and the blimp settles to its mooring.

Air Tour 3

The Everglades and Florida Keys. The Whitewater Bay Section over the Cypress area.

A charter trip of the GOODYEAR BLIMP *of* 4 *or* 5 *hours for* 4 *passengers, forenoons,* $25.00 *per passenger, or* $100 *per trip, if scheduled one day in advance—from base on Dade County Causeway.*

This offers an exciting view of the Everglades and the Florida Keys. The coral formation of the keys can be easily seen and marine life studied. Tropical and salt water fish are seen in the clear streams and lagoons along the keys, schools of shark and barracuda, are plainly visible, while the Keys themselves stretch to the south like green ottomans on a turquoise carpet.

Great flocks of birds are often sighted; heron, ibis, and other tropical birds flying toward the Everglades over coral rock formations submerged in water of many vivid colors.

The tropic beauty of the Everglades National Park unfolds beneath the cruising ship. Here flamingo, heron and other exotic birds feed in safety; deer, alligators, wild turkey and other game enjoy freedom in retreats that even Indian hunters cannot reach. The hidden hunting villages of the Seminoles themselves are within close range of amateur photographers in the gondola.

POINTS OF INTEREST

Downtown Miami

BAYFRONT PARK, Biscayne Blvd. between SE. 2nd St. and NE. 6th St., and extending to Biscayne Bay, consists of 42 acres of land pumped from the bay and landscaped with tropical shrubbery. Pelicans and gulls are seen on a sandspit jutting out into the bay.

The AMPHITHEATRE was the scene on February 15, 1933 of an attempt on the life of Franklin D. Roosevelt, then President-elect, that resulted in the death of Mayor Anton J. Cermak, of Chicago; in March, 1939, a plaque was unveiled in his memory. The amphitheatre is planted with profusion of royal and coconut palms and has a cream yellow stucco stage of oriental design with a gray platform and a red bordered brown curtain. A turquoise colored marquee bordered with a red and green striped awning topped with a dome painted turquoise and buff covers the central stage. The stucco structure is topped by two towers with onion-shaped domes painted in blue and silver. The equipment includes a loud-speaker and the green benches seat 8,000.

The main PROMENADE, bordered by vivid flower beds, and hedges of royal palms and clipped pine leads from the foot of E. Flagler St. to the bay. Benches line the promenade and the bayfront where Miamians and visitors come to watch the sunrise or the reflected glow of the sunset. Strollers crossing the park's broad lawns should watch for almost invisible guy-wires that anchor many of the large trees against the wind.

North of the main promenade are two telescopes of the Southern Cross Observatory. The telescope is placed on an iron standard and is furnished with eye pieces allowing magnifications from 55 to 260 power, diagonal and sun glasses, and slow motion apparatus. Free lectures are given Tues., Thurs., Fri. and Sunday Evenings.

A ROCK GARDEN in the park, built of coral rock and planted with palms, ferns and other tropical growths is a cool haven. There is a stone house and benches here and bird song can be heard.

In the MUNICIPAL YACHT BASIN, N. of Bayfront Park at Biscayne Blvd. and NE. 6th St., stream-lined pleasure boats and deep sea fishing boats come and go daily. At one of the piers

tickets are sold by the carnival method for sightseeing, fishing and glass-bottom boat trips. At another pier is the deep sea fishing fleet where trim speed-boats dock, advertising "one or two places for tomorrow." People crowd the pier when the fishing boats come in, bearing their catches of sailfish, shark, barracuda, tarpon and other deep sea game fish. Then the shining gear of the boats and the day's catch are open to inspection. Most boats have bamboo poles attached to the cabin which are drawn up when in port like masts but dropped at an angle when in fishing waters so the bait swims high on the surface to attract gamey fish. Several boats have harpooning decks extending forward from the bows. Game fish prizes are posted on a large mechanically operated bulletin board.

The MIAMI AQUARIUM (R) is a ship set in sand on Biscayne Blvd. at NE. 6th. St. In front of the entrance girl artists make portrait sketches for a tip, and two agile monkeys, chained to a revolving iron ladder, swing tirelessly around and around. The vessel is the *Prinz Valdemar* an old Danish barkentine. During the boom it was converted into a night club, and while it was being towed to its location off Miami Beach, it sank in the bottle neck of Miami harbor, blocking it when the city was in greatest need of lumber and supplies stowed in the ships waiting outside. After several months, it was raised and brought to its present location. In 1927 it was set in cement and fitted out as an aquarium. Live exhibits include sea turtles of several species, starfish, sea anemones, sea urchins, stone crabs, crawfish or Florida lobsters, shrimp, sea biscuits, conchs, morays (infectious but non-poisonous eels), sharks, stingrays or "stingarees," alligators, crocodiles and two manatees or sea cows, seldom seen in captivity. Mounted specimens include a barracuda, a jewfish, a swordfish, a shovel-head shark and scores of shell specimens.

In cages on the upper deck are Florida "gophers" or terrapins, ground hogs, a baboon, monkeys, four raccoons, an eagle and, surprisingly enough, two bob-tailed chickens. There are tables on deck for eating and drinking and seats for those who wish to sit and look out over the fishing decks and the sparkling waters of Biscayne Bay.

The MIAMI DAILY NEWS TOWER, Biscayne Blvd. at NE. 6th St., standing near the site of the original Florida East Coast R. R. tracks, is a representation of the Giralda tower of Seville. This ocher-colored adaptation has somewhat modified the structure of modern needs in the introduction of extra windows, but the general effect has been preserved.

The portals of this building embody striking detail in huge

capped columns and scroll arch, with a Spanish shield or keystone. Within the foyer are panels in relief depicting the evolution of the art of painting.

The MIAMI HARBOR, E. of the News Tower, occupies an area purchased by the city from Henry M. Flagler at a cost of $1,000,000. Great liners dock here during the tourist season, many of which come from foreign ports.

DADE COUNTY COURTHOUSE, W. Flagler St. at NW. 1st. Ave., is the most imposing structure of the community and occupies a full city square. Resting upon a pedestal base, the general style is that of a straight line levantine composition. The lower floors are a reproduction, in pillars and frieze, of the Parthenon. Above this section several other stories are supported by fluted columns surmounted by floriated caps. Just under the pyramid apex a fine example of an octagonal Greek temple with "criteria" embellished gable roof appears. Mosaics adorn the ceiling of the main corridor.

The 16th to the 25th floors are occupied by the city and county "escape-proof" jail. The pyramidal summit is 28 stories above the pavement. Completed at a cost of $4,000,000 in 1928 the building is illuminated at night and can be seen 15 miles away.

The CITY CURB MARKET, SW. 2nd Ave. and Miami River, is a white building with a red tile roof and open on all sides. One end is devoted to small plants and flowers, cut and potted, on counters or in tiers against the wall.

Fresh, locally grown vegetables are piled high in the stalls; tropical jellies and preserved fruits are displayed; odd fruits such as the brown sapodilla, guava, mango, scarlet surinam cherry, golden tangelo and kumquat are ranged side by side with oranges, grapefruit, tiny lady-finger bananas, and strawberries. One corner of the building contains the meat department. The fish and seafood stalls are in an adjoining building, directly on the river bank.

FIRST PRESBYTERIAN CHURCH, E. Flagler St. at SE. 3rd Ave., is a white stucco rectangular structure with a Corinthian facade. A square tower at the rear of the edifice is designed like that of an old Scottish church. This, Miami's oldest church, was completed in 1900. Almost incredible offers were made for the land during the boom but Henry M. Flagler, the donor of the land and builder of the church, specified that it was never to be sold.

SITE OF ROYAL PALM PARK, just E. of the church, is indicated by a few of the original coconut palms. Here stood the band shell, destroyed by fire March 21, 1928, where William Jennings Bryan once held his out-door Bible classes, and where Arthur

Pryor's band played twice daily during the boom. The grounds are now occupied by several buildings and a parking lot.

ROYAL PALM HOTEL GROUNDS, SE. 2nd St. and SE. 3rd Ave. was once the site of the Royal Palm Hotel. The gardens contain many large specimens of tropical trees and shrubs. The large frame structure painted the yellow and white with which Flagler often adorned his buildings, was demolished in 1930. After the Breakers Hotel burned in Palm Beach those who had patronized the fashionable Flagler hotels began to consider these wooden buildings fire traps. The furnishings of the Royal Palm were shabby. During its last days visitors paid $25 for a room in which they were likely to stumble over the worn carpets. Flagler's F.E.C. went into bankruptcy, the buildings needed repairs, business didn't warrant any restoration and this combination of events caused the hotel to be closed. When the building was torn down the lumber was so was so eaten by termites it could not be sold as second-hand material.

PFLUEGER'S MARINE MUSEUM, 1367 N. Miami Ave., was once a bank building. The high ceiling supported by massive columns in the one time lobby makes an impressive setting for the hundreds of mounted fish that, in or out of glass cases, line the snow-white walls. The large cases fit between the columns and are perhaps eight inches deep; the narrow cases are the width of the columns and very shallow. Each case has a reef scene painted naturalistically as a background for the brilliantly colored fish. Almost every kind of fish found in Florida waters may be seen; red, blue, green, gold, black, purple. They run the gamut of rainbow colors. Odd and exotic in appearance, some of the names are intriguing: rainbow parrot, mud parrot, red-lined parrot, four-eye butterfly, angel, trigger, tang, and file.

The museum is open daily from 9 a. m. to 7 p. m. and admission is free.

Northwest Miami

MIAMI LUMMUS PARK TOURIST CENTER, NW. 3rd St. and NW. River Dr. (R), has a RECREATIONAL AREA of bowling greens, croquet, roque, horseshoe and shuffleboard courts, a clubhouse, an illuminated checker and chess pavilion and a juvenile section. Miami Lummus Park is not to be confused with Miami Beach Lummus Park.

OLD FORT DALLAS, NW. section of the park, was built by Federal soldiers during the Seminole War and was the southern terminus of the Capron Trail. The building was originally at SE.

1st Ave. and Miami River. The present structure, housing the headquarters of the D.A.R., is of white limestone with doors and windows of hand-wrought iron. The building was made from the materials of the original fort.

The SCOTTISH RITE TEMPLE, directly N. of the park, a large buff stucco building with a green tile roof and pyramided dome, is distinguished by its trend toward Egyptian architecture. The bold lines of the heavy pillars from base to cap are topped by figures of the two-headed Phoenix.

COPPINGER'S PIRATES' COVE AND TROPICAL GARDENS, N.W. 19th Ave. and Miami River, (*open* 8-6 *daily; adm.* 25*c*) (*see Boat Trip* 1).

KNOWLTON'S TROPICAL FISH AQUARIUM, 1525 N.W. 27th Ave. (R) (*open* 9-5 *daily*), is a shop with many varieties of tropical fish, goldfish and a collection of tropical birds including canaries, parakeets and doves.

ORCHID DELL GARDENS, NW. 27th Ave. NW. 16th St. (R) (*open* 9-5 *daily*: *adm.* 25c), has rare and commercially grown orchids. Broad-leaved ferns hang on the walls and in one corner a decorative fountain trickling into a mossy pool preserves the proper degree of humidity within the building.

MUSA ISLE INDIAN VILLAGE, NW. 26th Ave. and Miami River, (*open* 9-6 *daily; adm.* 25c), presents the Seminole Indians as they live in their camps. At the entrance to the camp is a trading post where the handiwork of the Indians is displayed for sale. Inside the village are the thatch-roofed platforms where the Indians live. Here also are a small zoo and a museum containing specimens of animal and bird life. Alligator wrestling is featured morning and afternoon, the exact time depending on the crowd.

HEN HOTEL, NW. 27th Ave. and NW. 34th St. (L), is a large unfinished structure that was started as a hotel during the boom of 1925. A hatchery composed of 60,000 laying hens 50,000 fryers and 50,000 incubator chicks was once housed here and since that time the building is facetiously called the "Million Dollar Hen Hotel."

BISCAYNE FRONTON, NW. 37th Ave. and NW. 35th St. (*adm.* 25*c*), is a large, coral tinted stucco building. A marquee is supported by blue columns with red capitals. Exhibitions of jai-alai are played here each night throughout the winter (*see Sports*).

HIALEAH PARK RACE TRACK, E. 4th Ave. and 25th St. (L) (*open* 7-6 *daily, free, except during racing season when adm.*

is $1.35 *for grandstand,* $4 *for clubhouse*), is approached through an avenue of tall royal palms planted with oleanders and a croton hedge. The vine-covered grandstand and the clubhouse built in 1931 are screened with clipped Australian pine and planted with purple bougainvillea; the combined seating capacity is 10,500. The wide, oval track, set in a broad expanse of lawn and vivid flower-beds, surrounds a 32-acre lake in which pink flamingos, seen from the grandstand, look like a great bed of pink water-lilies. These birds, 300 in number were brought from southern Cuba and are kept in the park by clipping their wings. Flamingos normally nest only in the tropics, and the one bird hatched in the park lake in 1936 was at that time the only one known to have been born in North America. It died at three weeks of age and is mounted, together with an adult specimen, in a glass case on the southern pavilion. During the winter of 1939-40, however, sixty-five young birds were hatched, all of them surviving. Black swans and white swans are also kept in the lake. A 250-foot trellis at the back of the grandstand is overgrown with purple bougainvillea. Behind the stands is the Australian totalizer, a large electrically operated board upon which the winners and the odds are posted. About 1,500 horses are housed in the stables which are a part of the race track plant.

The SEA SHELL HOUSE, 2115 NW. 56th St. (*private*) was constructed with 44 bushels of sea shells, geometrically patterned and imbedded in cement. The owner collected the shells at beaches on the east Florida coast.

The NATIVE WOOD EXHIBIT, 2923 NW. 7th St., (*adm. free*), is the result of years of research and collecting by the late owner, H. B. Vivian. Among the collection of native woods, seeds, and leaves are an assortment of dried anonas including cherimoya, soursop, sugar apple and "Bullock's heart."

Some specimens show the various uses of the common palmetto trunk; several hard spheres resembling mahogany cannon balls are tree calabashes; an odd idol-like figure is made of red berries from the aden-enthera tree of Africa, otaheite apple wood, and choma tecoma argenta wood from Africa; a table has been manufactured from a strangler fig bole, a segment of which serves as the table top. The single leg is a red-stopper, a Florida hammock tree. There is a full-grown coconut the size of a small hickory nut; a man-sized vase, its lower half a gigantic coconut bole, hollowed out, the upper half a cabbage tree trunk.

Glass cases line the walls, in which are displayed thousands of seeds and dried leaves, native and exotic.

Northeast Miami

MIAMI WOMAN'S CLUB BUILDING, at NE. 17th Terrace and the Bayfront, is a five-story buff stucco building with a red tile roof and three tiers of balconies overlooking a patio on the north side of the building. This club maintains the FLAGLER MEMORIAL LIBRARY (*open* 9:30-5:30 *daily except Tues. and Sat.*, 9:30-9). The MIAMI FLORIDA WPA ART GALLERIES are also located here. (*Open* 9-4 *daily except Sundays.*)

A large CRYSTALLIZING PLANT, 3831 NE. 2nd Ave. (R) (*open* 9-5 *week days; guides*) gives forth an aroma of candied fruit. The four-story buff stucco building is trimmed with green. The specialty is fruit cake baked in crystallized grapefruit. Fruit crystallizing in this plant requires up to 30 days for completion.

LIBERTY SQUARE, NW. 12th Ave. to NW. 15th Ave. between 62nd and 67th Sts., is a 62-acre tract on which a Negro housing project is built by the Federal Housing Administration at a cost of nearly $1,000,000. In the center of the square is an administration building and recreation hall of white stucco with grayish white shingles. The other 34 buildings are made of similar materials, and consist of 243 family units fronting on palm-planted courts provided with sand piles and playground equipment for children. The houses are of storm proof construction and an air of cleanliness prevails throughout the project. In 1939 there were 730 additional units provided at a cost of approximately $1,600,000.

Southeast Miami

BRICKELL PARK, Brickell Ave. between 5th and 6th Sts. (L) has a variety of tropical vegetation.

SIMPSON PARK (*open*) S. Miami Ave. and S.E. 15th Rd. was named for Dr. Charles T. Simpson, pioneer South Florida naturalist, and created for the preservation of one of the few native hammocks in the city. Picnic grounds are open to the public.

VILLA SERENA, 3115 Brickell Ave. and 32nd Rd. (L) (*private*) was the home of the late William Jennings Bryan. The large, white stucco house with green tile roof of Colonial design, is visible through tropical shrubbery.

The JAMES DEERING ESTATE, 3250 S. Miami Ave. (*private*), is known as Villa Viscaya. After five years of construction, it was completed in 1916 at a cost of $15,000,000. The house and grounds are screened from the road by a pink concrete wall

with primitive designs or symbols scratched into the concrete, topped with festoons of orange flame flower and purple bougainvillea. The house is not visible from the road.

U. S. COAST GUARD AIR STATION (*open* 1-5 *Sat.*, 10-5 *Sun.*) S. Bayshore Dr. at Aviation St., has a gray stucco hangar housing the planes of the Coast Guard fleet. The hangar opens on the east where a concrete runway gives amphibian planes passage into the bay. From S. Bayshore Dr. the building is approached through a landscaped yard; the main drive is lined by hibiscus and red-leaved acalyphia clipped to uniform size.

In times of national emergency the Coast Guard comes under the jurisdiction of the Navy; otherwise it operates under a branch of the Treasury Department. Aside from rescuing crippled craft, the Coast Guard provides medical service for those taken ill at sea, makes flights with serum, and transports ill seamen to the Key West Marine Hospital. Other activities include transportation of Federal prisoners, aerial surveys, storm warnings, and mosquito control flights. The Dinner Key Station was established in 1932.

PAN AMERICAN AIRWAYS BASE (*open*), 2500 S. Bayshore Dr., is approached through an avenue of royal palms centered with a parkway planted with purple bougainvillea, scarlet hibiscus and other tropical plants.

On the bayfront the terminal building, erected in 1934 on land pumped in from Biscayne Bay, is a smooth white stucco structure of modern design, two stories high in the center, with one-story wings. The central two-story section is circled with a yellow and white frieze of rising suns and winged globes and is connected at the corners by sculptured eagles. Standard weather equipment is mounted on top of the building.

Quiet shades of blue and gray decorate the interior. In the center of the room a 10-foot revolving globe shows the airlines in colors. The beamed ceiling, two-stories high, is decorated in blue and gray with signs of the zodiac surrounding a compass. A frieze in the same tones of blue and gray traces the progress of aviation from Leonardo da Vinci's design of 1490 for a bird-shaped airplane to the Martin commercial ship of 1933. On the mezzanine floor are offices and a restaurant and a cocktail room overlooking Biscayne Bay.

The operations of the airline are carried on with quiet efficiency and courtesy in offices and through grilled ticket windows. Blue-clad pilots and airline officials move in and out through doors to the loading piers. An omnipresent voice speaking through a carefully toned loudspeaker system announces departures and arrivals

of clipper ships to and from West Indian and South American ports—Havana, Merida, San Juan, Rio de Janeiro, Buenos Aires.

From an outer promenade, atop the single-story wings of the building, takeoffs and landings of the giant clipper ships can be seen. Passengers are ushered into an outgoing plane, the door is closed, moorings are loosed, the four motors begin to throb, the plane moves out between two rows of buoys, leaving a broadening white wake behind, turns into the wind in open water, and presently is in the air settling to its course. Soon it is only a dot against a bright sky. The watchers on the promenade come to, sigh, put their cameras away, and go downstairs.

Pan American planes run daily both ways to Havana, a 2½-hour trip, and every Thursday to Merida, Mexico, in 5 hours. There are daily trips to Nassau, requiring only 2 hours. Clippers come and go five times a week to Buenos Aires, by the east and west coasts of South America. The east coast trip takes 6 days of daytime flight, with stops at San Juan, Puerto Rico; Port of Spain, Trinidad; Para, Brazil; Recife, Brazil; Rio de Janeiro, Brazil; and on to Buenos Aires, Argentina. The more direct west coast route take 4½ days, with overnight stops at Barranquila, Colombia; Guayaquil, Ecuador; Arica, Chile; Santiago, Chile; ending the run at Buenos Aires.

Points of Interest in Miami Environs

THE NORTH MIAMI ZOO (*open* 9-6:30 *daily*: *adm.*: 25*c*, *children* 15*c*), 136th St., North Miami, is privately operated and was formerly known as the Opa Locka Zoo. More than 200 exhibits include 3,000 animals and tropical birds, and a reptile collection of unusual variety. Every afternoon at 4 o'clock and hourly on Sunday an animal show is conducted; trained monkeys, dogs, ponies, and birds are exhibited at these shows. The New York Zoological Society sent a colony of giant Galapagos turtles to the zoo, which, although still relatively young, weigh over 200 pounds each. When brought to the zoo a few years ago these mammoth land turtles weighed about seven pounds each.

Many of the exhibits are kept in outdoor cages. Some animals are tame and several wander at liberty including a young deer and peacocks.

GREYNOLDS PARK, Dixie Highway just north of North Miami, was built and landscaped by CCC labor in an area of abandoned rock pits. A stone observation tower with a spiral ramp is patterned after an Aztec temple. A pavilion of native rock overlooks the blue lagoons of the former rock pits. On the western side of the park are picnic grounds in a native hammock, and groves of glossy Caribbean pines. There are boating and swimming facilities.

ARCH CREEK, NE. 2nd Ave., North Miami, is bridged by a natural rock formation. During the Seminole Indian War this bridge was the scene of several skirmishes, and from Indian mounds nearby many shell and stone artifacts have been taken. Some of these artifacts are on display at a house (*open*) beside the bridge.

The BATTLE CREEK SANITARIUM, Park Way, Miami Springs, is the southern division of an institution founded in Michigan by Dr. John Harvey Kellogg. The building resembles the cliff-dwellings of the southwestern American Indians; story rises above story in a terrace-like arrangement and the whole is topped by a mound-shaped cupola. It was built for a hotel by Glenn Curtiss, the pioneer aviator.

The EASTERN AIRWAYS, NW. 36th St., occupies buildings that were formerly the terminal of the Pan American Airways. The central building houses the waiting rooms and offices; the adjoining

buildings are used as repair shops. The front grounds are beautifully landscaped; the landing field is in the rear.

The MIAMI MUNICIPAL AIRPORT, 11229 NW. 42nd Ave., the third airport established in the United States, was built in 1912 by the Curtiss Exhibition Co., headed by Glenn Curtiss, the pioneer aviator. The annual All-American air maneuvers are staged here, usually in December. Military, commercial, and private planes converge on Miami from all parts of the country. A hundred navy planes execute intricate maneuvers and aerial clowns put their planes through stunts. Great army bombers drop earthward to loose imaginary explosives while racing planes circle the pylons. An exhibition of commercial planes, comparable to an automobile show, is conducted in connection with the meet.

OPA LOCKA, NW. 27th Ave., takes its name from the beginning and ending of Opatishawockalocka, the Seminole word for hammock. Standing in a relatively high area, the domes and minarets of its ADMINISTRATION BUILDING, patterned after a Mohammedan mosque, can be seen for miles. The homes and buildings for this area, developed by Glenn Curtiss, copy Moroccan, Arabian, Egyptian, and Persian architecture, and the streets bear Iranian names.

The UNITED STATES NAVAL RESERVE AVIATION BASE (*not open*), Opa Locka, is a 250-acre tract where naval and marine corps reservists attached to the station are trained. Property and hangars are leased to the Navy by the City of Miami.

The MIAMI MUNICIPAL DIRIGIBLE HANGAR, Opa Locka, is a black and orange building standing across the field from the naval base. During the season this structure houses two Goodyear blimps that make sightseeing trips from a downtown base.

The MOORING MAST, Opa Locka, is one of the five in the U. S. with complete mooring facilities for large dirigibles. The *Macon,* the *Akron* and the *Graf Zeppelin* are among the ships that have moored here.

Part III

COCONUT GROVE — CHAPMAN FIELD — MIAMI BEACH — CORAL GABLES

Miami, Miami Beach and Coral Gables

COCONUT GROVE

COCONUT GROVE, five miles southwest of Miami was a settled community when Miami was but an Indian trading post. It was a rough community, however, being composed of families who eked out a bare living from the dubious "profession" of wrecking or the manufacture of coontie starch which was transported by boat to Key West. The few houses were crude shacks built of lumber salvaged from wrecked vessels.

Located on Biscayne Bay, east of Coral Gables, the Coconut Grove of today is a residential section characterized by the quiet dignity of its many secluded homes. On the eastern boundary, fronting the bay are the larger and older estates, their backs turned to the Grove, isolated and aloof behind high walls, screened by a dense jungle of trees and tangled vines.

Between these estates and a Negro settlement on the west is the newer Coconut Grove where writers, scientists, and professional men have built more modest homes. A wide variety of architectural types is represented and harmonized by lofty trees and tropical shrubbery. Toward the north, farther from the bay, is an area mostly occupied by smaller houses, the homes of laborers, tradesmen, fishermen and their families.

Hotels, apartment buildings, and rooming houses, abounding in other sections of Miami, are infrequent in Coconut Grove. Electric signs and sidewalks are generally lacking except in the small business district. Automobiles provide the usual means of transportation and pedestrians are rarely seen on the winding streets.

Social life in the Grove is one of small sets or groups and is largely seasonal. Conservative and, for the most part, financially secure, many residents spend their time fishing or golfing by day and playing bridge in the evening. At one time when society was more democratic the Housekeeper's Club was the center of social activities but as it gradually became popular with tourists many of the older Grove residents withdrew.

Such quiet forms of entertainment as they pursue during the winter months are abandoned about the middle of April when they close their homes, move north where they remain to vote or until frost, and then journey back to their local homes for the winter.

Among the churches in this community are the vine-covered

St. Stephens Episcopal and the Plymouth Congregational. The New England spirit of the latter has yielded to the environment to the extent of adopting the model of the Spanish mission for its architectural design. The Bryan Memorial, Methodist, is a mosque-like building erected on land donated by William Jennings Bryan. A simple white Georgian Colonial structure is the home of the Christian Scientist.

An atmosphere of the past and of the sea lingers about the Grove, possibly because so much of the natural hammock has been preserved here, or, it may be because so many old timers have tales to tell of piracy and wrecking that took place not too long ago.

Black Caesar, boldest of the pirates, had his lair in the deep, blind-mouthed channels among the reefs and mangrove-covered keys to the east and south. He was a giant Negro chieftain who had been shanghaied aboard a slave trader off the coast of Africa and shipwrecked on the southeast coast of Florida. In revenge, following his escape, he became a pirate and plundered passing vessels until unfortunate owners and underwriters determined to wipe out all such lawless bands. While attempting to save Blackbeard, another pirate, Black Caesar, was captured by a patrol boat and was hanged in the colony of Virginia.

For many years after the pirates had disappeared, their brothers-in-crime, the "wreckers," made sailing along the Florida coasts a nightmare for shippers and owners. These men shifted channel lights or put up false beacons and waited, for vessels to ground or sink. They then looted the ship's cargoes. The Coast Guard finally broke up this practice which existed even into the present century.

Coconut Grove owes its existence to the sea. The first settlers were men who obtained their sustenance from it, largely by wrecking. This practice, always illegal, became a "profession" by which they gained a livelihood, sometimes precarious, sometimes lavish. Building materials, food, and clothing, including not only the necessities of life but also its luxuries were continually washed ashore. Many are the stories told of wine and liquors salvaged from the waters around the Grove. One tale has it that at one time wine was had in such quantities an old timer tried a full bath in it in an attempt to cure his rheumatism. They tell of a Seminole, invited to a find of pineapple cheese, beefiron and wine, who became so heavily logged that his squaws could not move him and built a palmetto shelter to protect him while he slept off the effects of his over-indulgence.

Some credence is given these tales by Rev. E. V. Blackman in

his book, *Miami and Dade County, Florida.* He relates that, in 1886, Judge E. K. Foster came into this area to straighten out a society "all messed up" over a local election contest and something like 1,000 packages of good liquor that had floated ashore from the wreck of a Spanish barque.

The original patentee of nearly all of Coconut Grove was Edmund D. Beasley, a soldier of the War between the States. For his services and resulting disability, the Government granted him 160 acres which he never occupied.

Dr. Horace P. Porter settled on this land in 1870, but apparently remained in possession only about six years. During that time he cleared the tract and planted a coconut grove. All the trees but two were destroyed by a storm in 1876 and Porter abandoned the plantation.

Another early settler was Samuel Rhodes, one time county treasurer, who laid out a town which he called New Biscayne at the site of what is now Coconut Grove. It is said of Rhodes that he kept the county's money in a tin box which he concealed in a crevice of a rocky cliff near his home. This cliff was probably in the Silver Bluff section which was later incorporated as a town and subsequently became a part of Miami.

The sea brought to the Grove one of its best known settlers, the late Commodore Ralph Middleton Munroe who once made his home on Staten Island. One freezing morning in 1874 he saw a boat, driven by a northeast gale, pile up on some broken crib-work near his home. Securing a helper, he went to the aid of the helpless vessel and succeeded in freeing it from its perilous position and bringing it to shelter. Thus he met its owner, William B. Brickell, bound for Biscayne Bay with supplies for his Indian trading post on the Miami River. Grateful for the timely rescue, Brickell offered Munroe a tract of land near his post and enough pineapples to start a plantation.

Three years later, Ralph Munroe visited his friend in South Florida and succumbed to its tropical lure. It was not, however, until 1882 that he was able to make it his permanent home. In that year he returned, not to claim the land on the Miami River offered him by Brickell, but to cast his lot with the pioneers of Jack's Bight, now Coconut Grove.

In this little settlement lived Charles Peacock, his wife and three sons, Jack Peacock, John Pent, Joseph Frow, his wife, two sons and a daughter, and Samuel Rhodes. Ralph Munroe adds the names of Newbold, Roberts, and Jenkinson.

It was Jack Peacock who, in 1884, built Dade County's first

hotel, the Peacock Inn, which, for many years, hospitably accommodated those visitors who were satisfied with simplicity and comfort.

Later when Mr. and Mrs. Thomas Hine and Edward Hine arrived from New Jersey, the women organized a church and the first sermon was delivered in the Peacock Inn by a son of Harriet Beecher Stowe. When funds were secured, Ralph M. Munroe donated land for a church which was called Union Chapel, later taken over by the Congregational Society and still later by the Community Club.

In those days this was an isolated community, its only point of communication, Brickell's trading post, and its outstanding landmark, after nightfall, Aunt Tilly Pent's outside cooking fire. Among the pioneers, these men of the sea, a good boat was the most necessary, the most valuable possession.

It was only natural, in such a community, that boats and their merits would become a subject to occupy the mind. It was natural, too, that there should be a man who was an authority on boats. Such a man was Old Ned Pent, boatbuilder and carpenter.

Occasionally, although he entertained a superstitious aversion to the work, he was called upon to fashion a coffin when one of his neighbors passed away. To overcome his peculiar reluctance and obtain his service it was necessary to first furnish him a jug of whiskey. It became the custom to lock the querulous old boatbuilder in his shop at sundown with the required lumber, tools, and whiskey. By sunrise, Ned would be found asleep with a well-finished coffin beside him. One morning following the usual procedure, Ned was found with the coffin completed to the last detail, but in the middle of it was, unmistakably, a center board.

Ralph Munroe became the unquestioned leader in the affairs of this struggling settlement. To it, he brought friends, who, yielding to its charm, and his, remained to make it the delightful place it is today. He pleaded for the preservation of wild life, particularly for the green turtle, whose breeding grounds were once along the Coconut Grove beach. He successfully fought the building of sea walls, believing that they destroyed the picturesque beauty of the coast line and endangered life and property by damming up natural outlets.

When he came to the Grove, coontie starch making was the only industry. Hoping to develop the settlement, he tried unsuccessfully to grow sponges, to cultivate pineapples, and to start the production of sisal. Though these attempts failed, he gave to the community the "Presto-type" boat. The first one, which he designed and built at his Coconut Grove home, he called the *Presto*. It is a

round-bilged sharpie, of very light draft, speedy, and easy to handle. An innovation in boat building, it became known to all lovers of sail.

Early in his career at the Grove, he attempted to establish a post office but the number of residents was too small to meet Government requirements. Then one day, on a visit to Fowey Rock Light, he found a document which read, "Coconut Grove Post Office, five miles south of Miami, discontinued." This was his first intimation that Jack's Bight had ever been known by another name. With the aid of this document, he succeeded in having the post office re-established. Later he learned that the original post office had been secured through the efforts of Dr. Horace Porter.

Commodore Munroe selected the old Porter plantation, in 1888, as a site for his home. When he began to clear the land, he discovered a seedling nursery set with rows of limes, mangoes, and avocados. Some of these trees are now in their prime. He planted the coconut grove which, perhaps, supports the town's claim to its present name. Rex Ingram, movie director, called it the most attractive grove he had ever seen. It was here that Ingram filmed the picture "Where the Pavement Ends."

Sometime during the middle eighties, Kirk Munroe, writer of popular stories for boys, was cruising in the waters of Key West. Hearing that another Munroe lived at Coconut Grove, he and his wife, the daughter of Amelia E. Barr, sailed up the coast to investigate. As many other visitors have done, he remained to make the place his home. The two Munroes organized the now famous Biscayne Yacht Club in 1887, with Ralph Munroe the first commodore. Later, Kirk Munroe founded a boys' school, now known as the Florida Adirondack School for boys.

The Housekeeper's Club, founded in 1891, was the social center of the entire countryside, attracting people even from the community on the Miami River who came by boat frequently bringing along their children for whom a nursery was provided. One night a young friend of the Commodore, Dick Carney, later the venerable Capt. Richard Carney, played a prank that was to become historic in the realm of practical jokes.

When festivities at the club were concluded, the mothers gathered their children from the nursery, identifying their offspring chiefly by the coverings with which they were wrapped. On this memorable occasion, while the revelry was at its height, Carney stole into the nursery and interchanged blankets and shawls on the sleeping children. If any serious developments followed they are not

recorded. Some of the old timers insist that this incident was used by Owen Wister in his novel, *The Virginian.*

The growing settlement was a pleasant place, somewhat secluded and peaceful in appearance until the advent of the World War. The United States Aviation Training School was established at Dinner Key in 1917. This key is now the greatest marine airway terminal of the Western Hemisphere.

Coconut Grove became a town in 1919 and was made a part of Miami in 1925.

Points of Interest in Coconut Grove

COCONUT GROVE HOUSEKEEPER'S CLUB, S. Bayshore Dr. and McFarlane Road (*private*), the oldest federated woman's club in Florida, is built on land donated by Commodore Ralph M. Munroe, early pioneer and marine architect. The two-story mission style building has a front of rough, gray native rock. Founded in 1891 by Flora McFarlane, the club was the social center of the whole countryside; people came to meetings by boat, particularly from the community on the Miami River.

ST. STEPHEN'S EPISCOPAL CHURCH, Ingraham Hwy. and Fuller St. is a small low building of white stucco with a red tile roof, nearly concealed by vines and tropical growth. The interior contains five oil paintings by Howard Hilder.

PLYMOUTH CONGREGATIONAL CHURCH, at Ingraham Hwy. and Devon Rd. is a reproduction of a Mexican mission. The interior of the vine-covered stone building is constructed on the lines of a basilica and the doors are said to have come from a Spanish mission in Mexico. In one of the doors is a round cat-hole, now covered with screen. Many outdoor weddings have been performed at the pulpit in the walled garden.

The BRYAN MEMORIAL M.E. CHURCH, is an octagonal building standing diagonally opposite the Plymouth Church. The church was named in honor of William Jennings Bryan, although Bryan was a devout Presbyterian.

The FORMER HOME OF RUTH BRYAN OWEN, Ingraham Hwy. and Royal Palm Ave. (*private*), was occupied by Mrs. Owen when she was in Congress. The house is a two-story white stucco building with two wings connected by a semi-open-air living room enclosing a patio. It is a combination of Mexican and Spanish styles, set well back from the street and bordered with shrubbery.

The BANYAN TREE, Ingraham Hwy. and Douglas Rd. has aerial roots growing from the branches to the soil over a circumference of 30 feet. The full, rounded crown of the tree measures more than a hundred feet across the top. Brought from Jamaica and planted here in 1908, its size indicates the phenomenal growth since that time.

CHAPMAN FIELD TOUR

COCOPLUM PLAZA, is a landscaped traffic circle formed by the junction of Ingraham Hwy., Le Jeune Rd., and Granada Blvd. The circle is named for the cocoplum tree that grows wild in south Florida.

The CORAL GABLES CANAL was developed during the boom to transport guests in gondolas from the Miami Biltmore Hotel to Tahiti Beach, then owned by the hotel. The canal is now open to boat traffic.

MATHESON HAMMOCK is a 400-acre public park on both sides of the Ingraham Hwy. marked by walls of cut stone blocks. Plants and trees of this native hammock are labeled. There is a beach on Biscayne Bay, also anchorage facilities for small craft. West of the highway is virgin hammock growth where lichens, air plants, mosses and native orchids grow. East of the highway are picnic tables, shelters and outdoor ovens. Both high and low hammocks are included, although the latter suffered when the Snapper Creek Canal was dug, drying up a natural spring in the park. Sinkholes contain many ferns, and spreading live oaks grow in the hammock.

The SAUSAGE TREE (*kigelia pinnata*) stands in front of a filling station, the grounds of which contain labeled tropical plants. This is the largest specimen in the United States and is the one survivor of several such trees propagated dby Dr. David Fairchild, noted plant explorer for the U.S. Department of Agriculture, in about 1905. The specimen came from the Victoria Lake region of Africa. Its hard, sausage-like fruit, sometimes 27 inches long with a weight of 15 pounds, hangs on a long rope-like stem during the winter season. It is not edible. The tree blossoms from May throughout the summer, bearing long pendant clusters of dark red flowers.

CHAPMAN FIELD, the United States Plant Introduction Garden, was established in 1923. Under its control is an area of about 160 acres, a portion of which was filled in by dredging canals in the swamp lands between Chapman Field and the Bay. The remainder of the field is composed of limestone and a little sand. When this area was given to the Department of Agriculture, the site was a flat of salty marl which had been pumped in, and was barren except for pine trees. Since its acquisition more than 9,000 labeled plantings have been made.

The Garden is divided into quadrants. First Avenue, which

begins at the entrance, and First Street which intersects First Avenue at right angles, are the streets that divide the garden into four quadrants, North, East, South and West. Numbering of the blocks begins at First Avenue and First Street, respectively, avenues paralleling First Avenue and streets paralleling First Street. Each block is designated first by the quadrant letter, then by the avenue number followed by the street number. No guides are available, but visitors are welcome to the Garden and information is given at the office. Because of the number of plantings, only the unusual are named here.

EAST QUADRANT:

Block E-1-1 contains miscellaneous trees. Near the E. corner stands the *Elaeodendron quadrangulatum,* (Brazil) the false olive, a large dense, shrublike tree with glossy green leaves that resemble holly.

Coccoloba grandifolia, a relative of the sea grape, attains an 80 foot height in the West Indies, and is conspicuous for its extremely large leaves.

Two specimens of *Garcinia spicata* (India) have dense foliage of glossy-leathery leaves.

Ficus roxburghii from India, is a low spreading tree with enormous leaves.

Ipomoea arborescens (Mexico) is a bush or small tree with showy white blossoms similar to morning glories.

Eugenia dombeyi, the Gumichama of Brazil, has a palatable cherry-like fruit.

Muntingia calabura, a small tree from Central America, produces a gooseberry-size fruit of sweet and distinctive flavor.

Lucumia nervosa, the canistel or egg fruit, has flesh like that of a sweet potato or sweetened pumpkin, and tastes more like a dessert than a fruit.

Achras sapota, the sapodilla, tastes somewhat like a pear, but its rough brown coat resembles a potato.

In Block E-1-2, at the corner of First Avenue and Second Street are two *Lantania commersonii,* large fan palms from Mauritius, colored crimson on petiole and ribs of leaves; and two groups of *Coccothrinax argentea,* the silver palm from the West Indies.

Within the block is a *Cupressus lusitanica* (Mexico) which is cultivated as a forest tree in Portugal. It has a valuable aromatic soft-grained wood.

A group of *Casuarina marginata,* trees with drooping branches, produce showy rose-colored flowers from July to December.

Along First Street are *Albizzia lebbekoides,* a small-leafed shade tree from the Philippines.

Near the office is an *Elaeagnus philippensis,* the Lingaro of the Philippines, a rank-growing vine or shrub that produces quantities of small, fragrant flowers followed by small edible fruit.

The large trees along First Avenue in Block E-1-3 are *Ficus sycamorus* or sycamore figs of Biblical reference, and the trees from which the Egyptians made their mummy cases. At the E. corner is a particularly fine *Ficus glomerata,* the cluster fig from India.

Aleurites moluccana, Polynesian candle-nut, has a kernel within its hard shell that contains oil which was used for lighting throughout the Pacific Archipelago until the introduction of kerosene.

Lysidice rhodostegia (southern China) has rose-purple flowers and pale pink bracts in late spring.

Pithecolobium brevifolium (Mexico) is covered with masses of small white or cream colored flowers during the summer.

Along First Avenue in Block E-1-4 are *Ficus vegelii,* large trees with many aerial roots.

Within the block are several varieties of *Myrciaria cauliflora,* the Jaboticaba, one of the favorite fruits of Brazil.

Covillea racemosa (Africa) has showy orange-colored flowers in autumn.

Near the back of the block a *Sterculia* from the Gold Coast of Africa is characterized by very large palmate leaves.

On the pergola in Block E-2-1 is a large vine, *Congea tomentosa* (Burma), covered in winter with a profusion of showy velvety pinkish-orchid colored bracts.

A large screw pine near the W. corner is *Pandanus tectorius.*

At the N. corner is a *Beaumontia grandiflora* or Herald's Trumpet, from the Himalayas, a large tropical creeper covered with flowers that resemble Easter lilies.

A hedge of *Eugenia coronata* (African Gold Coast) borders one side. This plant has small dark green leaves and quantities of tiny white flowers.

Near the E. corner is *Jacaranda acutifolia,* planted from seed presented to President Roosevelt by the President of Argentina on the former's good-will trip there.

Schefflera actinophylla, an ornamental Australian tree, has beautiful foliage and an unusual and conspicuous terminal inflorescence of radiating, showy, red spikes.

Two groups of palms, *Styloma pacifica,* the East Indian fan palm, and *caryota plumosa,* a fish-tail palm, stand on the lawn.

Near the office in Block E-2-2 is a group of the Natal plum, *Carissa grandiflora,* a spiny shrub with dark green foliage, fragrant

white starry blossoms, and scarlet plum-like fruits that are eaten raw or made into jelly. In front of the office is *Ochrosia elliptica,* a shrub with leathery foliage and red inedible fruit. Near-by is a *Thirnax wendlandiana,* one of the Florida fan palms.

In the patio between the office and the plant houses are bright showy bougainvilleas; within the planthouses are numerous plants including a collection of orchids.

A windbreak of tall *Casuarina lepidophloia* (Australia) forms a wall of dark green along Block E-2-3.

Miscellaneous trees form the planting in Block E-2-4, among which is a row of *Ficus religiosa,* (India and Ceylon), the Sacred Bo tree under which Buddha is said to have spent seven years in penance.

Extending S.E. on First Street from Third Avenue is an avenue bordered with royal palms. The first four on either side are *Roystonea oleraceae* (Central America), that grow 120 feet high; next, one *Roystonea borinquena* (Puerto Rico); then four of *Roystonea regia;* then an older planting, all of *Roystonea floridana* (Florida).

In Block E-3-1 palms and unusual showy bougainvilleas predominate.

Among the palms, *Bentinkia nicobarica* from the Nicobar Islands is particularly graceful.

A collection of palms in Block E-3-2 includes the tropical American spiny Acrocomias; the Sabals, unarmed fan palms of the Western Hemisphere; *Linoma alba* (Mascarene Islands of the Indian Ocean) with long and gracefully curving feather-like leaves, and from the same islands, *Hyophorbe verschaffelti,* the pig-nut or spindle palm.

Block E-3-3 is planted in coconut palms from Ceylon, bananas and plantains from many places.

A collection of young palms is planted in Block E-4-3. In the edge of the water at the E. corner of the lagoon grows a small *Nipa frutescens,* which differs from other palms in that it can endure sea water. It grows in great abundance along the swampy coast lines of Borneo, the Malay Peninsula and the Philippines.

In Blocks E-5-1, E-5-2 and E-5-3 are collections of nearly 300 hibiscus varieties, many of which originated here, while others were imported from Hawaii, Panama and Puerto Rico.

The vine collections in Blocks E-6-2 and E-6-3 include many odd specimens. Unusual genera include *Passiflora* which has blue flowers; *Petrea,* its lilac-like clusters bearing lavender and violet flowers in the same cluster; *Bignonia* with long tube-like purple flowers; *Aristolochia,* the flowers of which look like toy ducks; *Elsota*

covered with large clusters of tiny purple flowers; and the *Stigmaphyllon* which bears clusters of yellow flowers.

SOUTH QUADRANT:

In Block S-1-1 many trees are planted, among which is a *Cupressus benthami,* a Mexican cone-bearing tree. Near it on the shop wall is a vine, *Bignonia magnifica,* usually covered with purple bell-shaped flowers. Vines of *Combretum paniculatum* are covered in March with large panicles of scarlet flowers.

Interplanted with *Flacourtia ramontchi,* the Governor's Plum which produces quantities of delicious plum-like fruit, are *Khaya nyassica* (Rhodesia) or red mahogany trees, a valuable timber said to be immune to termites. These trees are planted in a row in Block S-1-2. Here also are several *Adansonia digitata,* the great African baobab tree. Its trunk grows to a 30-foot diameter and trees of this species are thought to be the oldest plants in existence.

Block S-1-3 includes *Pachira fastuosa* (tropical America), leafless in March when it is covered with showy pink or white blossoms that resemble shaving brushes. Here are large trees of *Syzygium cumini* (East Indies and Burma), the Java plum, valuable for making wine and jelly. The *Lagerstroemia speciosa,* Queen's flower or tree crepe myrtle produces masses of purple flowers.

A variety of young trees covers Block S-1-5. Across from this block is a hedge of *Schinus terebinthefolius,* the Brazilian pepper or Christmas berry tree which produces vivid scarlet berries in midwinter.

Among the miscellaneous shrubs, vines and trees in Block S-2-1 is the *Combretum grandiflorum* (Africa) on a tall trellis. The flowers and some of the foliage at blossoming time are bright scarlet, and the flowers contain so much nectar it can easily be shaken out.

Varied temporary plantings cover Block S-2-2.

Block S-2-3 is planted with shrubs, among which are *Calliandra surinamensis* with dainty pink and white "fairy duster" blossoms; *Lawsonia inermis,* mignonette tree yielding henna dye; *Jatropha hastata* with glossy dark-green foliage and brilliant scarlet blossoms.

A vine collection is planted in Block S-2-4, and in Block S-3-1 are many bougainvilleas and palms.

Blocks S-3-2 and S-3-3 are planted with dwarf Malay Coconuts.

Among numerous palms planted in Block S-4-1 is *Copernicia cerifera,* the Brazilian Wax palm which yields the carnauba wax used in manufacturing candles.

Elaeis guineensis, the African oil palm, Block S-5-1, is said to be the world's leading oil-producing plant. The seed within the hard

shell produces oil used for margarines, cooking oils, and the grease from the fleshy pericarp is valuable for trade purposes.

Block S-5-3 is planted with varieties of *Phoenix dactylifera,* the date palm.

Separating Block S-5-5 from the N.E. is an avenue of *Melaleuca leucadendron* (Australia), the cajeput tree. Near the N. corner is a small *Phlebotaenia cowellii,* violet tree, found elsewhere only in Puerto Rico. Quantities of violet-colored blossoms make a showy display, and the wood is so hard that the Puerto Rican natives call this tree "hueso," meaning "bone."

Blocks S-6-1 and S-7-1 are planted with miscellaneous shrubs.

WEST QUADRANT:

Young plantings of miscellaneous trees cover Blocks W-1-1, W-1-2, W-1-3, and W-1-4.

Blocks W-2-1 and W-2-2 are irregular in form and definite designation of plantings is difficult. The high rock fort-like walls were erected as windbreaks when this site was but a wind-swept rocky plain. Many palms, rubber trees, coffee, and *Theobroma cacao* from which chocolate is produced are planted here. *Palaquium philippense,* gutta percha tree has an odd leaf that is dark green on top and satiny golden-brown underneath.

Outside the N. wall is a young *Licania rigida* that produces oil used in varnish, and so valuable that the Brazilian Government prohibits its exportation; this is one of the few species existing outside Brazil.

Many palms grow in Block W-3-2 and in Block W-2-3 are imported varieties of *Litchi chinensis,* the Chinese litchi.

Citrus species, avocados and mangos are planted in Blocks W-2-4, W-3-1 and W-4-1. West of the area lies 65 acres of pinewoods. In the pot-holes of the area are hundreds of *Hevea brasiliensis* coffee, and one Mangosteen, a rare slow-growing fruit tree.

NORTH QUADRANT:

Outstanding in Block N-1-1 is the *Lodoicea sonnerati,* which, although not a true coconut, is commonly called the double coconut. This is the largest seeded plant in the world. So far as it is known, this specimen is the only one planted out of doors in the United States. Four years are required for the fruit to mature from the blossom. It weighs about 40 pounds and is not edible. Among other trees here are *Bauhinia galpinii* with bright terra cotta blossoms and the *Cananga odorata,* the Ylang-Ylang from whose fragrant greenish-yellow blossoms perfume is made.

Yellow flowers are produced on three trees in Block N-1-2: the *Tecoma argentea,* the *Cochlospermum vitifolium* and the *Peltophorum africanum.* Here too, are two *Kigelia pinnata* trees (Africa), bearing huge "sausages," and *Borassus flabellifer* (Ceylon), the Palmyra palm of many uses. Sugar is made from the sap.

Tectona grandis, teakwood tree, conspicuous for its extremely large leaves, grows in Block N-1-3.

Block N-2-3, the rock pit, is an old rock quarry into which soil was brought and more than 100 plant varieties were set. An unusual tree *Hernandia sonora* (Sumatra) has curiously shaped nonedible fruit. The black seed hangs from the center of a large, white, translucent, inverted, bell-shaped covering; through a hole in the bottom of this covering the black seed is seen. Many varieties of aloes, ficus, and palms are here. Within the S. rock-walled corner is *Artocarpus communis,* the breadfruit tree which is so sensitive even to the cool weather that it does not thrive here.

About 50 varieties of mangos grow in Blocks N-2-1 and N-3-1, and Ficus species cover Block N-2-2. Miscellaneous trees and varied young plantings are in Block N-4-1.

MIAMI BEACH GENERAL INFORMATION

RAILROAD STATIONS: Available in Miami.

AIR TRANSPORTATION: Air Ticket office, 1301 Washington Ave.; Air Travel Service, 1445 Collins Ave.; Miami Seaplane Service, Inc., 380 Alton Rd.; rates by chartered planes dependent on trip.

BUS LINES: (Interstate) Florida Motor Lines and Greyhound Lines, 515 Washington Ave.; Pan-American Bus Lines, 827 Washington Ave.; local busses: Miami Beach Railway Co. terminal, Alton Rd. at 5th St. Fare 10c.

TAXIS: Prevailing rates, 15c for first 1/5 mile, 15c for each 1/5 mile thereafter. No zoning system.

JITNEY LINES: Over both county and Venetian Causeways; Terminal N.E. 1st St. and Miami Ave., Miami. Fare 10c and 15c, respectively.

TRAFFIC REGULATIONS: No unusual traffic regulations; all streets are two-way except Sixth St., between Ocean Drive and Washington Avenue. Parkometers on Ocean Drive, 5c for 1 hr. Parking lots 15c to 50c. Right turns allowed on all red lights.

SPEED LIMIT: Business section 15 m.; residential section 25 miles; causeways, 35 miles. Slow traffic on causeways must keep to right. Drivers' licenses and semi-annual car inspection required.

STREET ORDER AND NUMBERING: All avenues, drives, and roads run N. and S. except Lincoln Rd.; streets and ways run E. and W. beginning with First St.

ACCOMMODATIONS: Hotels offer all classes of accommodations; many open for season only. Year 'round hotels make reductions in summer rates. Homes may be leased for the season. Apartments are available by the day, week, month or season; also rooms in private homes, with higher rates prevailing during the winter. There are no trailer or tourist camps.

CAUTION TO TOURISTS: Excessive exposure to sunlight is inadvisable. Fifteen to 30 minutes exposure the first time is sufficient. This time may then gradually be lengthened from day to day until one becomes accustomed to the sun.

INFORMATION SERVICE: Chamber of Commerce, Fifth St. at Alton Rd.

RADIO STATION: WKAT, 1759 N. Bay Rd.

AMUSEMENTS AND RECREATIONS: Eight motion picture theatres; several commercial pools. Among them are: Roman Pools, 23rd St. at Ocean Dr.; Deauville Pool, 6701 Collins Ave.

BEACHES: Miami Beach on the ocean front.

TENNIS: Flamingo Park, Meridian Ave. at 11th St.; Washington Park, Washington Ave. at 2nd St.; Lincoln Park, Lincoln Rd. at Washington Ave. Fees vary according to the season and park.
DIAMOND BALL: Flamingo Park, Meridian Ave. and 11th St. Fee 10c.

GOLF: Miami Beach Municipal course, Washington Ave. at Collins Canal. Daily greens fee, winter $1, summer 50c. Caddie fee $1 for 18 holes. La Gorce Golf Club, 5701 Alton Rd. and Bayshore Golf Club, 2239 Alton Rd., 18-hole courses, offer season subscription at varying rates, dependent on privileges.

OTHER RECREATIONAL FACILITIES: Basketball, chess, checkers, horseshoe, shuffleboard (10c hr. per person), volley ball, at Flamingo Park, Meridian Ave. at 11th St.; Diamond Ball, organ concerts, vaudeville shows, (*small admission*). Art and Spanish classes, free. Supervised play at Washington Park; Miami Beach Arena, South Beach, at Ocean Dr.; Million Dollar Amusement Pier, South Beach at Ocean Dr.; Free astronomical observatory, Miami Beach, Library grounds, Collins Ave. at 22nd St. each Monday evening.

FISHING BOATS FOR CHARTER: Rates varying, are available at the Chamber of Commerce and Floridian Hotel Docks, E. end of County Causeway. At the Rod and Reel Club, Hibiscus Island off the County Causeway, free information about all kinds of fishing may be obtained. Fishing pier at Sunny Isles, N. Miami Beach, (*small admission*).

NIGHT CLUBS: Inquire at hotels, as they change from season to season.

Post Office . . . Miami

Miami Beach Residence . . . British Colonial Type

Miami Residence . . . Stucco and Glass Brick

Fountain . . . Coral Gables

Opa Locka Administration Building

Plymouth Congregational Church . . . Coconut Grove

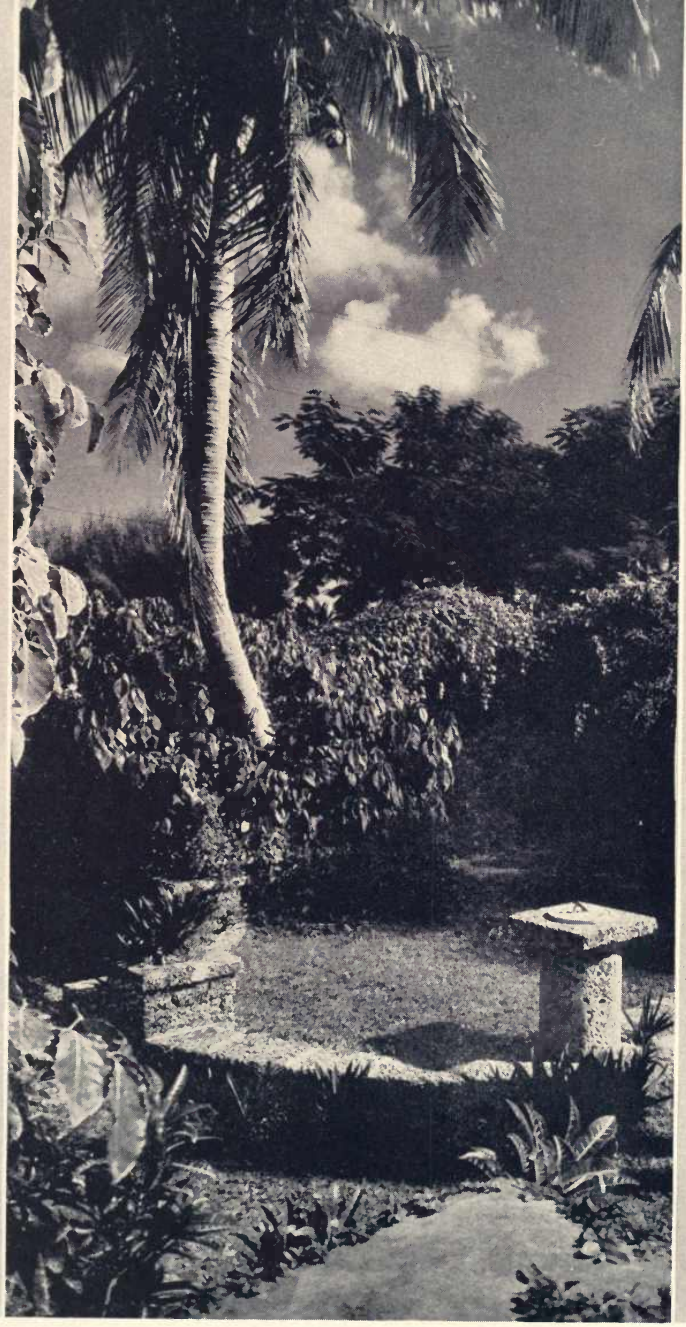
Miami Beach Hotel

Miami Beach Post Offi

A Miami Doorway

Residential Street . . . Coral Gables

Miami Beach Estate



A Miami Garden

CALENDAR OF ANNUAL EVENTS

(*dates to be announced*)

January:

Annual Fashion Show, Roney Plaza Hotel Gardens

Continuous Art exhibit at Miami Beach Public Library

Fishing Tournament January to April

February:

Annual International Miami-Nassau Yacht Races off Government Cut, sponsored by Nassau Yacht Club.

Garden Tea at Harvey Firestone Estate, 4400 Collins Ave. sponsored by Women's Association and Miami Beach Community Church.

11th Annual Sir Thomas Lipton Cup Race off Miami Beach. 30 miles. Miami Beach Professional Tennis Tournament, $2,500 purse, Flamingo Park.

March:

Easter Sunrise Service, Ocean Front, Lummus Park

Miami Beach Annual Birthday Celebration

Miami Yacht Club—Nassau Yacht Club, ocean sailing.

March-May:

Greater Miami Fishing Tournament

October:

Dade County Hallowe'en Party, Parade Prize Program, Flamingo Park.

December:

Annual Christmas Eve Party, Flamingo Park

Miami Beach Kennel Club Opening.

THE STORY OF MIAMI BEACH

MIAMI BEACH stretches for seven miles along the barrier reef that separates the Atlantic from Biscayne Bay, across from Miami, thus providing seashore and sparkling "scenery" for the mainland cities that make up this composite resort area. It has a population of less than 29,000, yet crowds within its narrow limits the sophistication of a metropolitan city of a million. Flash and excitement hold the spotlight, and when things are in full swing the island city more closely resembles a spangled revue than a wealthy resort.

Against an extravagant architectural setting, splashed with crimson bougainvillea and the latticed shadows of palms, moves an effervescent human mixture. By day, beach costumes compete with the spectrum and by night jewels shatter it. Theatricals, sports and social headliners attract fun-seeking thousands and these in turn strive to become a vicarious part of the celebrity extravaganza. In consequence, Miami Beach draws the great, the ambitious and the sycophant—touts and dubious sports, big shot gangsters and gamblers, notables of the stage, screen, and boxing arena, financial and social luminaries, chronic first-nighters, and seemingly all the rest of the country's professional ringsiders who thrive on flashlight bulbs.

Quite consistently, this Miami Beach has its Minsky's Burlesque, its keno parlors, its corner saloons and back-room bookies, its championship prize fights and its supercharged night clubs to extract winnings from lucky horse track customers; its swagger surf clubs and brilliant beach cabanas; its Lincoln Road, aglitter with the familiar fashion shops of New York, London and Paris; its Ocean Boulevard lined with sleek new hotels and apartments; its Pine Tree Drive shaded by wind-breaks of Australian pine, serving to remind that but a few years before all this was the site of a pioneer homestead; and finally, it has its remnants of free beaches for local citizens and transients.

A slender strand of seashore holds together the foibles and pretensions of the transients, but to the lee of this prevails an atmosphere that ignores the nearby carnival fanfare. Composed mostly of land dredged in from Biscayne Bay and attached to existing sand dunes and mangrove flats, the city is in reality a group of landscaped islands, surrounded by protected waterways. Quiet lagoons and meandering

canals provide safe moorings as well as miles of choice waterfront sites occupied by costly homes, combining taste, charm and tropical beauty. This restrained though richly resplendent environment dominates the place rather than the paraded kaleidoscopic animation of the ocean front.

The city also has its commercial side, with areas more utilitarian than ornamental. The ship channel, entering Biscayne Bay, skirts its southern tip and here are freight docks, warehouses, oil tanks and wholesale structures. These merge into a hybrid business and amusement sector—a mixture of cheap hotels, boarding houses, bars, corn game layouts, barbecue stands, bathhouses, stores, a pier occupied by the Minsky show, and an oceanfront dog track. This in turn blends into the downtown retail district with its chain stores and kosher markets and restaurants bearing signs to match the prevalent speech of what is locally designated South Beach.

North of this is a densely built-up territory of hotels and apartment houses, and here, extending along Ocean Drive, are Lummus Park and Miami Beach, two of the city's three public bathing beaches which swarm with humanity in winter and summer. Opposite sides of Ocean Drive, for the length of its beaches, offer a study in contrasts—on the one side the typical gleaming white and tropical green of a smart south Atlantic resort, spick and span hotels, sheer of outline and exclusive in appearance; on the other, a setting for trim bathing beauties but noticeably preempted by the pulchritude of north Atlantic amusement beaches, including a fair representation of Coney Island curves.

The decisive cross street of the town is Lincoln Road, a dividing line between north and south Miami Beach. Seasonal branches of world style-center shops line this broad thoroughfare for approximately ten blocks, and for the convenience of prospective patrons it has dual sidewalks divided by grassed parkways, one for pedestrians, the other for window-shoppers.

Beyond Lincoln Road, hotels and waterfront estates, controlling riparian rights, shut off a view of the ocean and disbar the public from beach and water, and it is not until the upper end of the city is reached that free surf bathing is again available. A fishing pier there, the only one along the entire waterfront, extends approximately 1,000 feet into the ocean.

The territory between the private estates and the public pier is occupied by acres of modest homes which except for size and cost resemble the more elaborate places architecturally and in their tropical planting.

Three causeways link Miami Beach with Miami. The original was a wooden bridge, extending from the Collins property, midway

of the islands, to Fifteenth Street in Miami. Collins, a fruit grower, and one of the island's early settlers and developers, was instrumental in getting this first span built in 1913. It has since been replaced by the Venetian Causeway, a toll bridge, which passed over a chain of artificially-made islands. The free county causeway to the south, completed in 1920 and widened several times since, however, carries the burden of traffic to and from the mainland. This span, tapping the business district of Miami Beach at Fifth Street, makes a broad S sweep across the bay, winding up with a loop around the traffic control circle at 13th Street and Biscayne Boulevard in Miami. Near the Miami Beach end is an anchorage for pleasure craft, and the winter-time flotilla of ocean-going yachts here makes it easy to believe that the Committee of One Hundred which directs the ethical affairs of the city is composed of millionaires.

The third and newest causeway, completed in 1928, connects the northern sections of the two cities, and serves as a direct route from the mainland to the public beach and pier near that point on the island. Northward from Miami Beach a highway paralleling the ocean continues up the islands nearly to Fort Lauderdale, and numerous developments form a more or less continuous resort fringe.

In the early 1880's, Miami Beach, like the rest of Dade County, was a waste of palmettos and mangroves. A sand ridge, running along the eastern side, was covered by a tangled mass of sea grapes. The island was a haven for rattlesnakes, wildcats, 'coons, 'possums, rabbits, and even bears.

Henry B. Lum, who visited this section in the year 1878, returned to his home in New Jersey and interested a number of men in a coconut plantation to be developed along the coast of Dade County. These first developers included Richard Carney, Stillwell Grover, E. T. Field, and Ezra Osborn, and Lum's brother, Charles.

The group acquired title to 80 miles of ocean frontage lying between Cape Florida and Jupiter at an average price of 75 cents an acre. They chartered a schooner, the *Ada Doane*, under Captain Ackerly and scoured the Caribbean for seed coconuts. From Cuba, Nicaragua, Trinidad, and other localities they brought coconuts until, by 1885, over 300,000 had been planted.

The enthusiasts were warned that in this climate coconuts might not yield sufficient oil to make their cultivation profitable. Before they had time to experience any misgivings on that score, however, they were beset by another difficulty. The plantation was infested with rabbits which ate the tender shoots of the sprouting coconuts as fast as they appeared. The planters used every known means to save their trees but in the end they lost.

From 1890 to 1900 the beach was deserted. In 1901 a Miami dentist, Dr. Gillespie Enloe, built a one-room shack on the Lum property and used it as a bathing casino. Occasionally he leased it to other Miamians who wished to spend a week or two at the beach.

A little later Richard M. Smith, a sandy-haired six-footer from Hartford, Conn., established a public Casino. He induced Charles H. Garthside, a Miami resident to furnish most of the money. They leased the land from Lum and built Smith's Pavilion, a two-story frame structure with a high peaked roof. The pavilion was completely open except for three small rooms on one corner of the second floor which served as dressing rooms.

Smith and James C. Warr organized the Biscayne Navigation Company and purchased boats to provide transportation across the bay.

Another man from New Jersey who had invested in the coconut venture was a horticulturist named John S. Collins. About the year 1907, then in his 70th year, Collins purchased from the group 1,600 acres of land, a tract, part of which is now occupied by the city of Miami Beach.

Collins began experimenting in a small way, clearing, with Negro labor, a ten-acre tract located between the present Pine Tree Drive and Indian Creek. He planted avocados, then little known and not produced on a commercial scale. He later introduced 16-ton tractors to speed up development of his plantation. To provide better and quicker means of getting his avocados to market, Collins started, in 1909, the canal which now bears his name and runs from what is now Lake Pancoast to Biscayne Bay.

When his avocado enterprise did not prove a success Collins turned part of his acreage into residential property. On June 3, 1912, the Miami Beach Improvement Company was organized with Collins as president and his son-in-law, Thomas J. Pancoast, as secretary, treasurer, and active manager.

Two days later, another development company, the Ocean Beach Realty Company, was also chartered. John Newton Lummus and John C. Gramling, associates in this new enterprise, began developing the Lum Property which at that time comprised all of what was then known as Ocean Beach, now known as "South Beach." The company recorded its plat as "From 5th to Biscayne and from Miami Avenue (now Washington) to Ocean Drive." No lots were sold until March, 1913.

One month after Collins and Pancoast received their charter they began the construction of a bridge across the bay to the center

of their holdings. Plans called for a 13,000-foot structure and work on it started July 22, 1912. Before it was finished Collins succeeded in interesting Carl G. Fisher in the venture.

Fisher loaned Collins $50,000 but this was insufficient to complete the structure. The developers ran half-page advertisements offering ocean front lots at $350 and up, saying, "The bridge was to have been completed at this time, but there have been unavoidable delays However, the completion is all arranged for and will be finished as rapidly as lumber can be furnished."

Those on the inside, however, knew that lumber was not the only thing that was lacking. The difficulty was again a financial one. Collins decided to hold an auction and, for this purpose, engaged Edward E. ("Doc") Dammers.

For many years Dammers had auctioned Florida land from the tailboard of a wagon and had the reputation of being able to sell "ice skates to a South Sea Islander." All the selling skill that Dammers possessed was certainly needed on this commission for, in selling many of Collins' lots, he had to point vaguely toward the mangrove swamps and say, "This lot is off in there somewhere."

The first lot, site of the Breakers Hotel, was sold to S. A. Belcher, for $3,700. Toward the last of the sale, ocean front lots were selling as low as $700 and Collins finally stopped the auction. But the sale had been a success. Sixty-five thousand dollars were realized from the auction and of this amount $33,000 was in cash. The completion of the bridge was assured and almost 100 more people were now property owners on the Beach.

Each day of the sale the auctioneer had offered a 600-foot ocean front lot without cost to anyone who would build on it a $200,000 hotel. The terms of the offer created considerable amusement at the time but no one accepted the offer. The tract, which went begging, is now occupied by the Roney-Plaza Hotel, a $2,800,000 structure.

Following the auction, work on the bridge progressed swiftly. It was completed in May, 1913 and was formally opened on June 12. Tolls were 15c for cars and carriages, and 5c for extra passengers, for bicycles or pedestrians.

Less than two years after the bridge was opened another city was erected. In the early part of 1915 a small group of citizens met in the back room of an apartment house at South Beach. A few weeks later, March 26th, a charter was granted and the City of Miami Beach, incorporated, began doing business. At that time there were approximately 300 people in the city but only 33 of these were registered voters.

Fisher received as a bonus for his loan to Collins 200 acres of land south of Nineteenth Street extending from the bay to the ocean, and began developing his property. He employed an army of men, three pumping boats, two dredges, fifteen barges, two oil tugs and placed an 18-inch pipe-line over a mile long to fill in his sandpit holdings. He drew so heavily on his northern bankers that one of them, James A. Allison, came down to investigate and stayed to invest $500,000. It was Allison who built what is now St. Francis Hospital.

Not satisfied with his holdings, Fisher bought 200 acres more in the Lum tract and another 60 acres along the bay. With John H. Levi in charge of engineering, doing the bulkheading and filling, Fisher combined with Collins in the Miami Beach Bayshore Company, investing in land lying north of Dade Boulevard and west of Indian Creek. They purchased land owned by the Flagler interests until they controlled Miami Beach as far north as 69th Street.

Fisher built the Flamingo Hotel in 1920 and the same year began to realize on his enormous investments as real estate prices sharply advanced. With the boom came an influx of new investors and the new scale of prices for real estate made the original developers of Miami Beach rich men.

Among those who came into prominence were John Levi who built Star Island and N. B. T. Roney who, in 1925, owned buildings including 200 shop units from Third Street to Twenty-third Street all within two blocks of the ocean.

The collapse of the boom was followed in 1926 by a disastrous hurricane, but in 1928, more than $3,000,000 was spent in private building construction and this figure was increased to $7,856,000 the following year. Between 1935 and 1939 building permits totaled $39,672,356 and real estate transfers amounted to $64,842,970.

Miami Beach builds more expensive homes than any city of like population in the United States. Figures drawn from building permits covering a six month period show that 121 residences had an average cost of $19,100. In some sections of the city no house costing less than $27,000 may be built.

Points of Interest in Miami Beach

MIAMI BEACH LUMMUS PARK, Ocean Dr. between 6th St. and 14th Lane, is not to be confused with Lummus Park Tourist Center at Miami (*see City Tour* 2). This stretch of the celebrated Miami Beach is one of the few open to the public, and the park extends to the coconut palm shaded beach where thousands enjoy the breakers and vivid blue waters of the Atlantic Ocean. This is a favorite spot for surf bathing, sun-bathing, the display of colorful beach clothing, tanned torsos, umbrellas and windbreakers, and for picnicking on the grounds among the palms.

COLLINS PARK, Collins Ave. and 21st St., contains tropical gardens and a bird sanctuary. Among plants here are East Indian bendy or tulip tree, with tulip-like blossoms; *cocos plumosa,* a feathery palm tree; and pandanus trees, called screw pine and resembling pineapple plants.

MIAMI BEACH PUBLIC LIBRARY (*open* 10-9 *weekdays*) is a stone building in the park nearly concealed by trees and shrubbery. At the ASTRONOMICAL OBSERVATORY (*open* 7:30-9:30 *p.m. Mon.*) in the east section of the park, lectures are given by astronomers. At the time of observation a telescope is mounted on a small platform approached by green steps.

LAKE PANCOAST is a small, palm-bordered lagoon formed at Collins Ave. by the juncture of the Collins Canal and Indian Creek. Paddle-wheel boats for rent are operated by bicycle pedals.

The JOHN S. COLLINS HOME, Collins Ave. and 26th St. (R) now housing a stock broker's office is a two-story white stucco house with a red tile roof, facing the ocean. Here lived the pioneer fruit grower and founder of Miami Beach who dug the Collins Canal to move fruit to the market.

The HARVEY S. FIRESTONE ESTATE, Collins Ave. and 44th St. (R) is at the point where Collins Ave. jogs (L) from the Ocean one block. The main entrance to the estate, on the 44th St. side, is bounded by a low bougainvillea-covered wall, above which rises a high clipped Australian pine hedge. Back of this is a galvanized cyclone fence topped with barbed wire.

Fronting Collins Ave., about halfway up the W. side of the estate, is a vine-draped pergola incorporated into boundary walls and hedges. The lower half is fenced in but the upper oval has been left open and affords a view of smooth lawn, bordered by banked shrub-

bery and extending eastward to a vine-covered, many-chimneyed Georgian Colonial mansion with a glazed tile roof. This estate is open each spring for a charity garden tea.

North of the Firestone estate, Collins Ave. winds between Indian Creek and estates fronting the ocean; red-roofed houses can be seen across the creek.

ST. FRANCIS HOSPITAL, 63rd St. (L) is a large, plain stucco building with buff trim and an illuminated cross on a tower, situated on Allison Island in the center of Indian Creek. Constructed in 1925, it cost more than $1,000,000. It is operated under supervision of sisters of the Order of Saint Francis; on the six-acre grounds are the hospital, Villa Francisco, nurses' home, swimming pool, tennis courts, laundry and private dock. Villa Francisco accommodates rest patients.

Pine Tree Drive receives its name from the double row of tall Australian pines between 30th and 46th Sts., through which it passes. These trees were set out about 1912 by John Collins as a windbreak for his avocado groves. Estates on the drive are owned by persons eminent industrially and socially.

The MUNICIPAL GOLF COURSE, Sheridan Ave., lies on both sides of Collins Canal. Eight holes are played on one side, after which golfers cross bridge No. 11 and the boulevard for the remaining ten holes. Along the banks of Collins Canal, red-leaved shrubs are planted and trimmed to form the words: "Municipal Golf Course, Visitors Welcome."

The MIAMI BEACH CONGREGATIONAL CHURCH, 524 Lincoln Rd., is of the Mission type architecture in the edge of an exclusive shopping district.

The Lincoln Road Shopping and Theatre District has double sidewalks, bordered with royal and coconut palms and divided by a parkway. The inner walks are for window shopping. Glass and chromium store fronts carry the names of New York and Paris establishments.

North Alton Road runs through a section of modest homes, some with light grey roofs to reflect the heat. Glass panels set in many roofs contain coils of black-painted pipe to provide hot water for household purposes through use of solar heat.

The upper reaches of the BAY SHORE GOLF COURSE (R) stretch N. between Meridian Ave. on the E. and Alton Rd. on the W. and are across the road from the northern section of the Municipal Golf Course.

The Sunset Islands, foot of W. 29th St., are a group of four islands developed into a restricted residential section. Construction began in 1935; many homes have been built costing more than

$100,000. Since about 1930 the islands have been lavishly landscaped so that new homes would have matured growth around them. The islands are entered from Bay Rd. on 29th St. with connecting bridges. Royal and date palms border the streets, hibiscus bushes dot wide green parkways. A windbreak of tall Australian pine borders the shore of each island.

ST. PATRICK'S CATHOLIC CHURCH (R) fronts on Garden Ave. which parallels N. Alton Rd. The building is of buff stucco with an octagonal tower topped by a red tile roof. There is a medallion stained glass window over the Gothic arched entrance.

The EQUESTRIAN STATUE OF AN INDIAN (L) near the Nautilus Hotel is made from oolitic limestone. The stone was quarried in Miami, crushed, and cast like concrete. This is one of the few statues in Miami.

Many large estates shut off the view of the shore along N. Bay Rd. Crimson bougainvillea and a profusion of tropical shrubbery stand out against white stucco walls. Houses of antique brick, unusual in south Florida, are in this area and many of the newer homes are marked by roofs of fabricated white shingles to reflect the heat. The Miami skyline is glimpsed across Biscayne Bay.

SURFSIDE PARK (R), Collins Ave., at 71st St., a popular bathing and picnicking area paralleling Collins Ave. and the shore for about six blocks, affords the first striking view of the ocean since Lummus Park. The straight line of white breakers on the curved beach presents an exhilarating picture. Palmetto-thatched sun shelters and stone block stoves, black with many picnic fires, are along the beach.

BAKER'S HAULOVERS is a channel where Biscayne Bay meets the ocean. An arched bridge extends across the channel. Before the railroad was built into Miami, the postman walked the beach from Lake Worth to be met here and brought by boat to Miami. The sand bar between the ocean and the bay also served as a convenient place to haul the boats over, thereby saving a long trip around the southern end of Miami Beach into the bay. A man named Baker assisted in the work, hence the name Baker's Haulover. A stone jetty, popular with fishermen, extends into the ocean.

On this road is the SUNNY ISLES CLUB, a two-story white stucco building with a red tile roof, fronting on the ocean. Constructed during the boom-time development of Sunny Isles, it is open as an eating and dancing place with refreshment stands, lockers and facilities for bathing. Extending eastward from it into the ocean is the Miami Beach Fishing Pier (*adm. 15c for walking, 40c for fishing*) 1,000 feet long.

OTHER POINTS OF INTEREST

FLAGLER MONUMENT, Bay Island, between the County Causeway and the Venetian Causeway, is an illuminated square white shaft, erected in memory of Henry M. Flagler by Carl Fisher, Miami Beach pioneer. At the four corners of the base are symbolic figures representing Pioneering, Engineering, Industrialism and Prosperity. The monument is accessible only by boat.

AL CAPONE'S HOUSE (*private*) is on the north side of Palm Island facing Biscayne Bay. The white mansion with a green tile-roof is barely visible over a high white stone wall.

CORAL GABLES GENERAL INFORMATION

RAILROAD STATIONS: Available in Miami.

AIRPORTS: Available in Miami.

BUS LINES: (Interstate) Florida Motor Lines, Greyhound Lines and Tamiami Trailways, terminal 2202 Ponce de Leon Boulevard. (Local) Coral Gables Bus Co., terminal 205 Coral Way; local fare 5c, to Miami 10c.

TAXIS: Prevailing rates: 15c first ¼ m., 5c each additional ¼ m. zoning system.

TRAFFIC REGULATIONS: No commercial parking lots.

STREET ORDER AND NUMBERING: Spanish street names are predominant and are arranged with deliberate irregularity to create a park-like beauty. Ponce de Leon Boulevard and Coral Way are the principal business streets. House numbering begins at Flagler Street and Douglas Road. Each street sign board carries the key number for that block.

PRECAUTIONS FOR MOTORISTS: All traffic signs should be carefully observed because the irregular plotting of streets and abundance of shrubbery create dangerous intersections.

ACCOMMODATIONS: Many hotels and apartments are open only from December to May. Rooms, apartments and homes are available by the season. All are listed with the Chamber of Commerce or the Coral Gables Realty Board. Tourist and trailer camps conveniently located, north city limits.

HOSPITAL: University Hospital, 3151 Coconut Grove Drive.

COLLEGE: University of Miami, 515 University Drive is a co-educational school, specializing in Pan-American culture and tropical botany and zoology. Its band and symphony orchestra are outstanding in the country.

LIBRARY: 1009 Ponce de Leon Boulevard.

CLIMATE AND APPAREL: An average yearly temperature of 70 degrees makes summer apparel and light wraps adequate.

INFORMATION SERVICE: Coral Gables Chamber of Commerce, Aragon Ave.

AMUSEMENTS AND RECREATION: One motion picture theatre. Swimming pools: Venetian Pool, De Soto Boulevard (municipally owned); admission to swimmers: winter 50c; summer 25c, children 15c. Locker accommodations and bathing suits for rent. Miami-Biltmore Pool, for hotel guests only.

BEACHES: Tahiti Beach, about 2.5 m. W. on Coral Way to Le Jeune Road, L. on Le Jeune Rd. to Cocoplum Plaza, follow sign to Beach. Admission, adults 25c, children 15c. No extra charge for bath houses. Swimming instructions and cabanas available.

SALVADORE PARK: Columbus Blvd. and Andalusia Ave. maintains tennis courts, shuffleboard, horseshoe, roque, croquet, and other adult and juvenile recreational facilities. Nominal fees for horseshoe, shuffleboard, tennis; few tennis courts free.

TENNIS: 997 Greenway Dr.; Salvadore Park at Columbus Blvd. and Andalusia Ave. Reasonable fees.

GOLF: Coral Gables Golf and Country Club, 9 holes, daily greens fee $1 winter, 50c summer, caddie fee $1; Riviera Golf Course, Bird Rd. S. of the Miami-Biltmore Hotel, 9 holes, daily greens fee 50c; caddie fee 50c. Miami-Biltmore Country Club, Anastasia Ave., (membership) 18 holes, greens fee $3 winter, caddie fee $1, $2 summer.

OTHER RECREATIONAL FACILITIES: Tropical Park Race Track from Nov. through Dec. and month of Mar. (General adm. $1). S. from Coral Way on Le Jeune Rd. to Bird Rd. R. on Bird Rd. to the track approx. 1.5 m. Coral Gables Riding Academy, 303 Giralda Ave., rate $2 1st hr., $1 each additional hr. Special rates by request.

CALENDAR OF ANNUAL EVENTS

(Dates to be announced)

January:

Latin American Institute, (an open forum for the discussion of Pan American affairs). University of Miami.

Left Handers' Golf Championship, Miami-Biltmore Golf Course.

Men's Amateur Golf Championship, Miami-Biltmore Golf Course.

Mixed Foursome Medal Golf Championship, Miami-Biltmore Golf Course.

Winter Institute of Literature, University of Miami. Season ticket for 18 lectures, $9; single admission 75c.

February:

Helen Lee Doherty Milk Fund Charity Ball, Miami-Biltmore Hotel.

March:

Florida Year Round Club Men's Golf Championship, Miami-Biltmore Golf Course.

Florida Year Round Club Women's Golf Championship, Miami-Biltmore Golf Course.

Mixed Doubles Tennis Championship, Miami-Biltmore Hotel.

June:

University of Miami Commencement, Coral Gables Country Club.

Concerts by the University of Miami Symphony Orchestra and Symphony Band, with guest artists at various times throughout winter. Concerts usually held at 2400 W. Flagler St., Miami.

November:

Thanksgiving Day Annual Golf Tournament, Miami-Biltmore Golf Course.

December:

Miami-Biltmore $10,000 open Golf Tournament, Miami-Biltmore Golf Course.

THE STORY OF CORAL GABLES

CORAL GABLES suggests grandeur but makes a point of unobtrusiveness. Its atmosphere is restful and life conforms to that pattern, in spite of imposing buildings, business streets of amazing widths, and a hotel tower that serves as a landmark for miles around.

Douglas Entrance, an elaborate portal consisting of a block-long building pierced by an arched opening, was once the main gateway to Coral Gables from the Tamiami Trail, but Coral Way, 14 blocks south of the Trail has since become the front approach from the city of Miami. Ponce de Leon Boulevard, paved 120 feet wide for a distance of five miles, is the main north and south traffic and business artery and bisects Coral Way which is equally wide. The Miami-Biltmore tower more or less symbolizes the pretentiousness that seemed necessary to Florida developments in the 1920's. It is the first indication to a motorist approaching from the Tamiami Trail that the solitude of the Everglades is suddenly to be replaced by a surprisingly new city, but ingeniously mellowed to give the semblance of antiquity.

Coral Gables is not a resort, but a pre-designed community of comfortable homes set in park-like surroundings with winding drives, abundant foliage and shaded greenswards. Curbs along streets are few except in the business area, and street intersections frequently provide an excuse for installing ornamental plazas, circles, parkways with stone benches, fountains, and decorative columns. In design and treatment these embellishments are notable for restraint.

Beginning at 37th Avenue, Coral Gables extends for 20 blocks westward along the south side of the Tamiami Trail where have been constructed gateways of Spanish and Italian design. Southward from the Trail the city reaches five miles to Biscayne Bay, where a stretch of bog land has been dredged in to form Tahiti Beach, the only mainland bathing beach in the Miami area.

The greater part of Coral Gables has been improved with paved streets, sidewalks, and ornamental planting. Boomdays construction has been kept in good repair and the landscaping carefully preserved. To the thousands or more homes built in the 1920's, hundreds more have been added in keeping with the general plan of the city. Original restrictions remain in effect and are rigidly enforced.

All essential details were predetermined when Coral Gables was designed, even to types of architecture permissible in certain zones

and all construction, including color schemes, is still passed on by city officials. While many of the homes are of the so-called "modified Mediterranean" type, zoning prescribes French and Dutch Colonial for certain sections, West Indian and African for others, and Chinese adaptations for still another. But harmony has been maintained by seeking subdued beauty rather than display.

The creation of this sylvan atmosphere was accompanied by one of the most vigorous and spectacular real estate promotions on record, a Nation-wide campaign that made Coral Gables a classic boomtime development. Lavish, ornamental offices, carrying out the motif of the development itself were installed in every important northern city east of the Rockies, and a fleet of busses cruised the highways of the Nation, bringing prospects. Full-color page advertisements appeared in national magazines, and the finest talent in the country, including concert and operatic stars and "name bands," was imported to entertain investors. William Jennings Bryan divided his time between conducting the world's largest outdoor Men's Bible Class in a Miami park, and lecturing for Coral Gables from a platform over the water of the Venetian Pool.

The name Coral Gables became almost as well known as Florida itself, yet this "$100,000,000 development" as it was called, was hewed from a plantation at Miami's back door by a native son and dreamer who foretold his love of beauty in a book of verse, *Songs of the Wind on a Southern Shore.*

George E. Merrick had inherited the plantation from his father, the Reverend Solomon G. Merrick in 1912 when only a woods road led to the property. Four years later Merrick subdivided a part of the home place and offered lots for sale, but with Europe at war there was little interest in real estate. Merrick finally engaged an auctioneer.

Since Miami bankers decided that the Merrick property was too far inland from the city and declined financial aid, Merrick offered free lunches and a bus ride to round up buyers. As he afterward related he hurried his prospects through the unsightly stretch en route. Auctions were held daily and Merrick began to buy up more land to add to the original 1,100 acres in the plantation. Original plans called for construction of houses only of coral rock, and Merrick imported from Cuba a crew of Spanish masons familiar with this material to build the first group of houses. However, as sales increased and the building tempo increased, restrictions against other materials were relaxed in the interest of speed. To meet the type of competition that developed with the boom, Merrick was compelled to organize a vast sales organization.

He continued to buy more land until he had pushed through to

the shore of Biscayne Bay to overcome the disadvantage of Coral Gables not being a waterfront development. One 140-acre tract in the middle of his holdings finally cost him $1,800,000.

From the princely Miami-Biltmore hotel to Tahiti Beach a canal was blasted through the coral rock which underlay the property, and over this waterway glided colorful gondolas manned by costumed gondoliers who crooned the love songs of Italy while rowing hotel guests to and from the beach. It was just as pictured in the magazines—languorous nights, scented breezes, sweet music, gaiety, color—the spell of the tropics. Merrick imported the gondoliers from Italy. Later the canal was widened, deepened, and converted into a practical waterway for sizeable yachts, allowing Coral Gable residents to moor craft almost in their own yards.

The development of Coral Gables utilized as far as possible materials at hand. Coral and the limestone from the near-by Florida Keys was extensively used in building, lending itself admirably to rapid mellowing. Plantings were more native than exotic, and every effort was made to efface the appearance of newness in landscaping and building. Stucco walls were stained to give a weather effect and patches of brick were set in and left unplastered to create the illusion of walls scaling from age.

The original plantation home, built of coral rock in 1906, stands in the midst of hundreds of these newer structures, but with its bright red tile roof it looks to be the newest of all. At a street intersection near the old home survives a strangler fig tree which grips a fence post that helps enclose a fruit-packing plant on the premises. At one time much of the plantation was planted in citrus fruit and the annual crop ran as high as 120,000 boxes. Many of the original trees are still alive and bearing on the lawns of expensive homes.

And so, George Merrick, by retaining much of the old, translated into reality the lines of one of his poems:

> By pitted walls of ancient rose
> Poinsettias' glow the night-noon shows.
> And purple petals sifting fall
> Upon the faded crumbling wall.
> As if, with vivid youthful glows
> To still enliven time-worn rose!

Merrick employed the best city designers, architects, and landscape artists available to work out together his plans, and not until this was completed was his marketing campaign launched. The first lot was sold November 27, 1921. The first street was opened and the first store building erected the following year. From then on work and sales progressed with such amazing speed that by 1925 the tract which had been increased to 10,000 acres was incorporated into a city,

and municipal bonds floated to install utilities and carry on improvements. City mail service was inaugurated in 1926, and the same year the Miami streetcar line was extended to the new city. Elementary schools, a hospital, and a university were established. In five years the place had become a self-contained community much as it is today except that time has since given it a genuine touch of age.

The collapse of the real estate boom left Coral Gables with a bonded debt of $8,000,000 and by 1930 defaults had exceeded $500,000. Tax delinquencies reached such a point that in order to refinance its debts the city was forced to foreclose on thousands of building lots for the benefit of creditors. All bonds were eventually refunded with new issues bearing reduced interest rates and extended maturities.

Ownership of property and control of the city passed into other hands, but Merrick, who became postmaster of Miami in 1940, was to have the satisfaction of seeing his original plans mature. So firmly had he established the roots of Coral Gables that when building activities resumed the high standards that he had imposed were never violated.

Points of Interest in Coral Gables

THE UNIVERSITY OF MIAMI, 515 University Dr., functions in several dormitories and in two boom-time hotels of buff stucco with red tile roofs, located about one block apart. Three long wings of the main building form a triangle around a landscaped patio. An observatory dome rises from the southeast corner. In 1939 the University bought the 400-room San Sebastian Hotel, converting it into class rooms, offices and apartments. Born of the boom, the school plays an important part in Pan-American affairs and in the cultural life of the community. A resident faculty of 75 is augmented during the year by visiting professors. Its location gives the university an advantage in certain tropical aspects of scientific investigation.

The university emphasizes Pan-American relations and considers the development of its Latin-American division one of the major features of its program. (*See Education*).

The school of music has developed the University of Miami Symphonic Orchestra and the University of Miami Symphonic Band.

Students in Marine Zoology make weekly trips to Biscayne Bay and nearby waters where, wearing diving hoods, they study marine life.

LOST LAKE AND CAVERNS (*open 2-6 daily: adm.* 40*c*), Bird Road, are built around an abandoned rock pit. A wild duck show, given five times daily on the hour, features "trained" mallards. Ducks attracted from the Everglades include the hell-diver, a small black duck with a white bill that gives it a parrot-like appearance. "Feeding the fishes" is a favorite sport here. Visible beneath a glass-bottom boat are varieties of fish that gobble oatmeal released from a hopper by the vibration of the motor. The bottom of the artificial lake is planted with fish grasses. A guide directs tourists through the arboretum. Plants from Java, South Africa, India, Australia, China, and South and Central America were imported through co-operation of the British and Dutch Governments and the republics of South America. Included among these are bo trees, sycamore fig, mangosteen, teakwood banyan, rubber tree, fishtail palm, bauhinia tree, fountain tree, litchi, African oil palm, sealing wax palm, and cajeput; cactus, fish poison, and bauhinia vines.

There are Alpine rock gardens, and a number of caverns have been excavated in the sides of a natural sinkhole. Known as Fort

Lonesome, the sinkhole gave its name to the surrounding area and was supposed to have been the hiding place of soldiers during the Seminole War. In the caves are a museum and a small aquarium with several species of gar pike native to the Everglades. It is one of the few surviving prehistoric vertebrates.

TROPICAL PARK RACE TRACK (*open daily free except in racing season when adm. is* $1 *for grandstand,* $3 *for clubhouse*), Bird Road, was originally a dog track. In 1932 the grandstand, seating 3,500, then facing west, was reversed and the surrounding area landscaped at a cost of $70,000. A clipped Australian pine hedge screens the track and the parking lot is planted with red bougainvillea. Tall Washingtonia palms shade the ground and the clubhouse entrance is landscaped with clipped Australian pine, royal palms, and scarlet salvia or Mexican sage. Races are held in December and March.

The CORAL GABLES CONGREGATIONAL CHURCH, Anastasia Ave. and De Soto Blvd., is an exact replica of a church in Mexico City. A square bell-tower, heavily ornamented with cast stone, rises above the buff stucco walls and the red tile roof.

CATHOLIC CHURCH OF THE LITTLE FLOWER, Palermo Avenue and Anastasia Ave. is a buff stucco building with a red tile roof and a balcony between its two low towers. The church stands in memory of Saint Teresa, a patron of the blind.

SALVADORE PARK fronting on Valencia Ave. from Columbus to Cordova Ave. has clay and asphalt tennis courts, shuffleboard courts, horseshoe rinks, bowling greens, area for quoits and croquet, a children's playground and picnicking facilities. Instructors in tennis and other games are on duty.

The VENETIAN POOL, De Soto Blvd. and Sevilla Ave. (*open year round, 8-6; adm.: summer, adults 25c, children 15c; winter, adults, 50c, children, 25c; locker, towel and suit extra*), municipally owned and operated, is a recreational development in an abandoned rock pit, landscaped with palms, flowers, and shrubbery. There is an artificial sand beach, and cast-concrete caverns and bridges resembling natural stone. Lamps similar to those in Venice are mounted on striped poles.

CORAL GABLES CITY HALL at the intersection of Coral Way, Biltmore Way and Le Jeune Rd., built of Key Largo limestone in 1928, has a curved columned portico, and a square clock tower. Atop the semicircular front is a bas-relief group carved in stone.

The CORAL GABLES LIBRARY AND COMMUNITY HOUSE, E. Ponce de Leon Blvd. at Phoenetia Ave. (*open 1-9 Mon.-Thurs.; 9-6 Tues., Wed., Fri., Sat.*), constructed by W.P.A. labor in

1937, is built of Key Largo limestone and consists of two one-story buildings with red tile roofs set at right angles and connected by an arcade patio. At the entrance are pylons, carved in bas-relief with symbolic representations of art and science. The pilasters surrounding both buildings are capped with bas-relief carvings of native fishes, birds and animals. The fountain on the northeast side of the library has four bas-relief nudes representing four moods of the sea. The base of the fountain has bas-reliefs picturing sea fishes and fowl. Designs and decorations were the work of the W.P.A. Florida Art Project.

CORAL GABLES ART CENTER, 300 Avenue Alcazar (*open* 9-4 *weekdays*), is a WPA Art Project community exhibition point and creative unit in the fields of ceramics, sculpture, and Index of American Design.

The DOUGLAS ARCHWAY, sometimes called the Ponce de Leon entrance to Coral Gables, stands at the point where E. Ponce de Leon Blvd. and Douglas Rd. join the Tamiami Trail. This mottled buff stucco arch is in the center of a building of medieval-type architecture. In both wings of the archway are apartments and studios.

Part IV

APPENDICES

CHRONOLOGY

1545 Escalante de Fontaneda, the first white man of record to traverse Dade County, is wrecked on the Florida Keys.

1566 Whites first settle in Dade County, and Governor Pedro Menendez de Aviles establishes the Jesuit Mission of Tequesta.

1699 The Barkentine Reformation is wrecked on the lower coast of Florida. The adventures of the survivors supplied the basis for the Dickenson narrative.

1743 San Ignacio Mission established.

1796 The first land grant issued in Dade County to Frankie Lewis by the King of Spain.

1808 Land grant issued to James Eagen (Hagen) near mouth of Miami River.

1826 The first Cape Florida lighthouse built at a cost of $15,457.

1830 Fort Dallas established by the United States Government.

1835 First Post Office in Dade County establishel on Indian Key.

1836 Dade County officially created by an Act of Legislature; Cape Florida lighthouse burned by Indians.

1839 Dr. Henry Perrine reaches Florida Keys and locates a preparatory nursery, December 25.

1840 Dr. Perrine massacred by Indians.

1842 Majority of Seminole sent West; remainder retreat to Everglades.

1845 Florida enters Union.

1850 All English plantations at Miami abandoned.

1870 Mail service established between Fort Dallas and Key West; William Brickell settles in Miami; a settlement, said to be the oldest on Biscayne Bay, made at Coconut Grove. First store opens there.

1873 First Post Office established in Coconut Grove.

1880 Census shows 100 people in Dade County.

1882 Three New Jersey men plant coconuts on Miami Beach.

1884 First hotel in Dade County opens: Peacock Inn, Coconut Grove.

1887 First Circuit Court in Dade County convenes in the barracks of Fort Dallas; Biscayne Bay Yacht Club organized, Coconut Grove.

1888 County seat moves from Miami to Juno.

1891 Mrs. Julia D. Tuttle settles in Miami; U. S. Plant Introduction Bureau established on Brickell Hammock; Housekeeper's Club of Coconut Grove founded.

1895 Henry M. Flagler first visits Miami; first subdivision, Riverside, platted by Tatum Brothers.

1896 April, the first passenger train enters Miami on the Florida East Coast Railway extension from West Palm Beach: May, the first

newspaper issued in Miami, The Miami *Metropolis,* now the Miami *Daily News;* July, Miami incorporated as a city by 343 voters with an approximate population of 1,500; October, first street graded in Miami. The first bank established in Dade County, the Bank of Bay Biscayne; Miami swept by a hurricane; Royal Palm Hotel built; Miami swept by fire.

1896-8 Churches organized: Presbyterian, Congregationalist, Catholic, Episcopalian, First Methodist, Baptist, Methodist Episcopal.

1897 First county fair in Florida held in Miami; first tourists arrive in Miami.

1898 Military camp for the Spanish-American War established in Miami.

1899 Dade County seat moved permanently from Juno to Miami; fire department organized.

1900 First golf course opens in Miami; first wagon road built through to Coconut Grove; Flagler Public Library founded; first Woman's Club (later named the Woman's Club of Miami) organized; the first civic organization in Miami formed, Miami Board of Trade.

1903 Miami *Evening Record* published; changed to Miami *Herald* in 1910.

1904 New Year's race between launches and dories; General John B. Gordon, youngest lieutenant-general of the Confederate Army, dies; Miami Choral Society gives first concert; Smith's Casino, the first bathing pavilion, is built on Miami Beach.

1905 Miami becomes a full-fledged port with the completion of Government Cut.

1906 Streetcar system inaugurated, July 4.

1907 First fire station constructed.

1909 Carrie Nation visits Miami; construction of City Hall; first theater opens.

1910 Census shows 111,935 people in Dade County; first hospital opens.

1911 July: First airplane flight in Miami, pilot Howard Gill.

1912 The Florida East Coast Railway extended to Key West; Glenn H. Curtiss establishes an airport northwest of Miami, third in the United States; first real estate office opened in Miami Beach.

1913 A two-mile wooden bridge completed between Miami and Miami Beach, June 12.

1915 First municipal advertising campaign, $1,900 being raised for publicity; incorporation of Miami Beach; ship channel from Government Cut through the Bay.

1916 Glenn H. Curtiss establishes aviation school; Arthur Pryor's band brought to Miami for daily concerts.

1917 Flagler Street bridge placed in operation (replacing wooden bridge); Dinner Key United States Naval Aviation Base established.

1919 Coconut Grove incorporated.

1920 County Causeway opened.

1921 Commission-manager form of government adopted in Miami; first building lots sold in Coral Gables; first broadcasting station opened in Miami, WFAW, now WQAM; First plat of Hialeah made and the town named.

1923 U. S. Plant Introduction Bureau moved to Chapman Field from

Brickell Hammock; Miami Banker's Clearing House begins activities. Clearings for the first month Jan. amounted to more than $1,000,000; steamship passenger service inaugurated between New York and Miami; start of the Miami boom; Bayfront Park developed from a mud-flat and Biscayne Bay.

1925 Streetcar service started between Miami and Coral Gables; Venetian Causeway constructed; Tahiti Beach opened; Coral Gables incorporated; Coconut Grove annexed to Miami.

1926 Hurricane 130-mile-an-hour wind, strikes Miami, Sept. 18; WMBF broadcasting station opened, now WIOD; University of Miami opens; Miami boundaries enlarged to take in 46 additional square miles of territory; Venetian Islands built in Biscayne Bay.

1927 Seaboard Airline Railway reaches Miami; Coral Gables Public Library established; Greater Miami Airport Association formed.

1928 City Hall of Coral Gables opened; Miami's first air line established; Pitcairn Aviation extended service from New York and Atlanta; name of the corporation was later changed to Eastern Air Transport, Inc., and in 1934 to Eastern Air Lines; Pan-American Airways service from Miami to Havana inaugurated; National Shriner's Convention: First nonstop airplane flight from New York to Miami, Jan. 4; Tamiami Trail opened; Present court house dedicated; First All-American Air Meet.

1929 Interocean mail and passenger line opened by Pan-American Airways, Inc.

1930 Naval Reserve Base and mooring mast established at Opa Locka; First annual International Flower Show held.

1931 Two horse racetracks opened—Hialeah Jockey Club and Tropical Park; John Tiger, one of the chief counselors of the Florida tribes, dies; Chapman Field, which served as a base during the World War reopened.

1933 First air-conditioned train comes into Miami; President-elect Roosevelt speaks in Bayfront Park and attempted assassination resulting in Mayor Cermack's death.

1934 New Federal Building dedicated; Pan-American air passenger, mail and terminal building opened: American Legion National Convention in Miami; Miami Beach *Tribune* published.

1935 Miami swept by hurricane.

1936 Dade County Centennial Celebration.

1937 Knight Templars National Convention; WKAT broadcasting station opened at Miami Beach; Roddey Burdine Stadium opens. Halcyon Hotel razed; Matecumbe Memorial Monument unveiled.

1938 Overseas highway opens to Key West; first Seminole Pageant; Fleischer movie studios open; New Post Office building dedicated at Miami Beach; Johnnie Billy shot by Chief John Osceola.

1939 First recall election of City Commission; first tropical festival; Diesel powered electric train service inaugurated between Miami and New York.

1940 Busses replace streetcars; 40 hotels built in Miami Beach.

BIBLIOGRAPHY

Arrendondo, Antonio de
Historical Proof of Spain's Title to Georgia . . . ed. by Herbert E. Bolton. University of California, 1925. 400p. illus.

Bailey, Harold Harris
Birds of Florida. Baltimore, Md. Williams and Wilkins Co. 1925. p. 146 plates, maps.

Baker, Mrs. Mary Evans (Francis)
Florida Wild Flowers. N. Y. Macmillan Co. 1926.

Barbour, George M.
Florida for Tourists, Invalids and Settlers . . . N. Y. Appleton, 1883. 310p. illus. maps.

Barbour, Ralph Henry
Let's Go to Florida. N. Y. Dodd, Mead and Co. 1926. 288 p. illus.

Beach, Rex Ellingwood
Miracle of Coral Gables; illus. by Edward A. Wilson. N. Y. Courier and Hartford, 1926. 63 p.

Blackman, Ethan V.
Miami and Dade County. Washington, D. C. V. Rainbolt, 1921. 255 p. plates.

Bolton, Herbert Eugene
Spanish Borderlands. Yale University Press, 1921. 320 p.

Bradlee, Francis B. C.
Piracy in the West Indies and Its Suppression. Salem, Mass. Essex Institute, 1923.

Brevard, Caroline Mays
History of Florida from the Treaty of 1763 to Our Own Times. ed. by James Alexander Robertson. DeLand, Fla. State Hist. Soc. 1924. 2 v.

Caine, L. S.
Game Fish of the South and How to Catch Them. N. Y. Houghton Mifflin, 1935. 259 p. illus.

Chamberlain, John Newton
Miami, Jewel of the South; 1921. 32 p. Privately printed.

Coe, Charles H.
Red Patriots. Cincinnati, Editor Pub. Co. 1898.

Cohen, Isidor
Historical Sketches and Sidelights of Miami. Cambridge, Mass. University Press, 1925.

Connor, Jeannette Thurber, tr.
Colonial Records of Spanish Florida. DeLand, Fla. 2 v.

Connor, Jeannette Thurber, tr.
Pedro Menendez de Aviles. DeLand, Fla. Hist. Soc. 1923.

Corse, Carita (Doggett)
Supplementary History of Florida. N. Y. Scribner, 1931. 91 p.

Cory, Charles Barney
Hunting and Fishing in Florida. Boston, Estes Lauriat, 1896. 304 p.

Cory, Charles Barney
Key to the Water Birds. Bradley Whiddon, 1896. 172 p. illus.

Cutler, Harry Gardner
History of Florida, Past and Present. N. Y., Lewis Pub. Co. 1932. 3 v. illus.

Dau, Frederick W.
Florida Old and New. N. Y. Putnam Co. 1934. 377 p. plates, ports. and maps.

De Croix, F. W.
Historical, Industrial and Commercial Data of Miami. St. Augustine, Record Co. n.d. unp.

Dorn, Mabel
Book of Twelve. Miami, South Florida Pub. Co. 1928. 64 p.

Dunn, Elias B.
Florida Weather and Climate. (Coral Gables, 1934) 41 p.

Endicott, Wendell
Adventures with Rod and Harpoon Along the Florida Keys. N. Y., Frederick A. Stokes 1925. 271 p. illus. ports.

Fairbanks, George Rainsford
History of Florida. Jacksonville, Drew, 1871. 350 p.
Florida: A Guide to the Southernmost State, Federal Writers' Project.

Fowkes, Jesse Walter
Aboriginal Wooden Objects from Southern Florida. Smithsonian Institution. 1928. 2 p. plates. (Smithsonian miscellaneous collections. v. 80, no. 9 publications 2960).

Fox, Charles Donald
Truth About Florida. N. Y., Chas. Renard Corp. 1925. 260 p. plates.

Gifford, John Clayton
List of the Trees of the State of Florida. Florida Federation of Women's Clubs, 1909. 24 p. pamphlet.

Gifford, John Clayton
Reclamation of the Everglades With Trees. N. Y., Brooks, Inc. 1935. 92 p.

Gifford, John Clayton
Rehabilitation of the Floridan Keys. N. Y., Brooks, Inc. 1934. 79 p.

Gifford, John Clayton
Everglades and Other Essays With Reference to Southern Florida. Kansas City, Mo. Everglades Land Sales Co. (c.1911) 134 p. illus.

Gifford, John Clayton
Prehistoric Mounds in South Florida. Science Mag. 75:313, 1932.

Gregg, William H.
When, Where and How to Catch Fish on the East Coast of Florida. 1885-1902. N. Y. Mathews and Northrup, 1902. 267 p. illus. plates, maps.

Holder, J. B.
Along the Florida Reef. (In Harper mag. v: 42 No. 9, Dec. 1870-May 1871).

Hollingsworth, Tracy
History of Dade County, Florida. Miami, Privately printed, 1936. 151 p. illus. ports. maps.

Hrdlicka, Ales
Anthropology of Florida. DeLand, Fla. State Hist. Soc. 1922. 140 p. illus. plates, ports.

Howell, Arthur Holmes
Florida Bird Life . . . N. Y. Coward-MacCann, 1932. 579 p. plates, Maps.

Johnson, Clifton
Highways and Byways of Florida . . . N. Y. Macmillan, 1918. 264 p. plates.

Kaplan, Moise N.
Big Game Fisherman's Paradise. Tallahassee, Dept. of Agriculture, 1936. 324 p. illus. maps.

Kenny, Michael
Romance of the Floridas. N. Y., Bruce Pub. Co. 1934. 395 p. illus. ports, maps.

King, Grace Elizabeth
De Soto and His Men in the Land of Florida. N. Y. Macmillan, 1898. 326 p.

Mahon, P. J. and Hayes, I. M.
Trials and Triumphs of the Catholic Church in Florida . . . Hyland and Co. 1907.

Miller, Stewart
Florida Fishing, N. Y. Watt, 1931. 320 p. illus.

Moyer, Homer E.
Who's Who and What to See in Florida. Current Historical Co. of Florida, 1925-1935.

Munroe, Ralph Middleton, and Gilpin, Vincent
Commodore's Story. N. Y. Ives Washburn Co., 1930. 384 p. illus. plates, port.

Mayo, Nathan
Florida, the March of Progress, Tallahassee, Bureau of Immigration, n.d. 63 p. illus. maps.

Nehrling, Henry
Plant World in Florida. N. Y. Macmillan, 1933. 304 p.

Norton, Charles Ledyard
Handbook of Florida. N. Y. Longmans, Green and Co. 1891. 392 p. maps.

Packard, Winthrop
Florida Trails as Seen from Jacksonville to Key West. Boston, Small, Maynard and Co. 1910. 300 p. illus.

Priestly, Herbert Ingraham, ed. and tr.
Luna Papers. DeLand, Fla. Hist. Soc. 1928. 2 v. ports.

Rainbolt, Victor
Town that Climate Built. Miami, Parker Art Co. 1926. 136 p. illus.

Ranson, Robert
Chronology of the Most Important Events Connected with Florida History. St. Augustine, The Author. 1930. 4 p. maps. pamphlet.

Reese, Joseph Hugh
Florida Flashlights. Miami, Hefty Press, 1917. 115 p.

Rhodes, Harrison Garfield
Guide to Florida for Tourists, Sportsmen and Settlers, N. Y. Dodd, 1912. 456 p. illus.

Roberts, Kenneth Lewis
Florida Loafing. Indianapolis, Ind. Bobbs-Merrill Co. 1925. 74 p.

Roberts, Kenneth Lewis
Sun Hunting. Indianapolis. Bobbs-Merrill Co. (c1922) 198 p. plates.

Roberts, Kenneth Lewis
Tropical Growth. (In Saturday Evening Post, April 29, 1922).

Shea, John Gilmary
History of the Catholic Church in the United States. Akron, Ohio, D. H. McBride and Co. 1892. v. 1, 2, 3, 4.

Simpson, Charles Torrey
Native and Exotic Plants of Dade County. Washington, D. C. Judd and Detweiler, n.d. 46 p. illus. pamphlet.

Simpson, Charles Torrey
Ornamental Gardening in Florida. Little River, Florida. The author, 1927. 243 p. plates.

Simpson, Charles Torrey
Florida Wild Life. New York, Macmillan, 1932. 199 p. illus. plates.

Small, John Kunkel
Flora of Miami. New York, The Author, 1913. 206 p.

State Department of Agriculture
Possibilities of the Everglades. Tallahassee, Dept. of Agriculture, n.d.

State Department of Agriculture
Florida Resources and Sports. Tallahassee, Dept. of Agriculture. 192 p.

State Department of Agriculture
Florida, an Advancing State. Tallahassee, 1928. 352 p. illus.

Stennis, Mary A.
Florida Fruits and Vegetables in the Family Menu. Tallahassee, Department of Agriculture, 1930. 100 p. plates, tables, (Bulletin No. 46).

Swanton, John R.
Early History of the Creek Indians and Their Neighbors. Washington, Government Printing Office, 1922.

Stockbridge, Frank Parker
Florida in the Making. By Frank Parker Stockbridge and John Holliday Perry. New York, Debower, 1926. 351 p. illus.

Sudlow, E. W.
Vizcaya, Romantic Palace on Biscayne Bay. (In Country Life, 66; 58; 65)

Torrey, Bradford
Florida Sketch Book. New York, Houghton, 1924. 242 p.

Verrill, Alpheus Hyatt
Romantic and Historic Florida. New York, Dodd, Mead and Co. 1935. 291 p.

Walker, Kay, comp.
Beautiful Homes of Miami and Environs. 1926. unp.

Weigall, Theyre Hamilton
Boom in Paradise. New York, A. H. King, (1932). 225 p. plates.

Will, Thomas E.
Everglades of Florida. (In American Review of Reviews, 1914).

Willson, Mrs. Minnie (Moore)
Seminoles of Florida. N. Y. Moffat, Yard and Co. 1931. (c1896).

Winter, Nevin Otto
Florida, the Land of Enchantment. Boston, Page Co. 1918. 380 p. plates, ports. map.

Woodward, C. C.
Florida Birds. Tampa, Florida Growers Press. 1931.

Supplementary Pamphlets

Holder, Charles Frederick
Along the Florida Reefs. N. Y. Appleton, 1892. illus.

Anonymous:
Designed to Withstand Tropical Storms. (In arts and decoration, February 1935. 42: 39).

U. S. Dept. of Engineers
Everglades of Florida; Report 62nd Congress, Document No. 89. Washington, Govt. Print. Office, 1911.

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